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Implications of the Influence of Traditional African Education on Technical Vocational and Agricultural Education in Ghana

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Abstract: *The paper examines the various attempts made by Governments, missionaries as well as individuals in the provision of technical, vocational and agricultural education in Ghana. It also examines the successes and challenges with respect to the implementation of technical, vocational and agricultural education in Ghana. Relevant literature and documents on Ghana's educational reforms were the main data used for this exercise. It was found out that the negative attitude of most Africans/Ghanaians towards technical, vocational and agricultural education was as a result of the influence of "logic" in Traditional African Education on manual work. It is recommended that all stakeholders should mount a sustainable public education on the influence of "logic" in Traditional African Education which works against the provision and practice of technical, vocational and agricultural education or manual work in the country.*

Keywords: Logic, manual work, traditional African education, influence, negative attitude

Introduction

Globally, education is meant to equip the youths with employable skills among other things. This means that education should prepare youths with skills that will make them self employed in addition to any white collar job that may be available to them. Education is meant to produce a sound and balanced personality. The youths must be able to use the head, heart and hand to improve himself/herself and the larger community, which he/she is an integral part. Where this is not realizable, it tends to create a whole lot of confusion and chaos. The result is mass unemployment, crime, prostitution and other nefarious activities. Governments alone (whether developed or developing) cannot employ the total populace and be paid from the national treasury. This is an impossible task. It needs the combined efforts of all stakeholders. There is also the need for sound and purposeful education. Education must be relevant to the socio-economic needs of the people. The need for skills acquisition for self-employment therefore, cannot be over-emphasized. Education is always meaningless if it fails to satisfy the yearning aspirations of the people. People pursue education with the hope that they would be gainfully employed in future. However, it is unfortunate that in most developing countries including Africa/Ghana the educational systems have not been so functional enough to empower the people economically. The technical, vocational and agricultural education, which should provide these employable skills to the youth, is not well managed in Africa including Ghana as a result of many factors. Developing countries are aware that the only way that unemployment can be reduced among the youth is to take our technical, vocational and agricultural education seriously. In Ghana, for example, the government is painfully aware of the failure of many of the attempts to reform the public education system. There has been a continuing aim to make education more relevant to the world of work after school to rural development and modernization of that predominantly agriculture-based economy (MOEYS, 2004). In view of this, governments, individuals and missionaries, all over the world, have tried in diverse ways to introduce technical, vocational and agricultural education as a means of empowering the youth to secure jobs after formal education.

In Africa, all the colonial masters introduced technical, vocational and agricultural education in their colonies. In Ghana, which is our reference point, the colonial rule did establish vocational, technical and agricultural education in the Colony. Governors Maclean and Winni et, for

example, did their best to establish model farms as well as technical schools in the 1840s to enable the school pupils acquire employable skills (Graham, 1976).

The missionaries also played a very key role in introducing technical, vocational and agricultural education in the colony (Ghana). The Wesleyan church, for example, under the leadership of Rev. Allein sought for permission to introduce agricultural education in Ghana in the 1840s. Again, Rev. Freeman and William Thackeray also established model farms at Beniah and Domnansi to train the young ones to acquire the skills of modern farming, (Graham, 1976).

The private people were also not left out in this exercise. A group of Europeans formed an experimental cotton plantation association to encourage Africans (adults and school pupils) to develop interest in farming. (Graham, 1976). All these interventions took place with the view to helping Africans, and for that matter Ghanaians, to accept manual work in order to reduce unemployment.

The attempt to introduce technical, vocational and agricultural education in our schools in Ghana did not end with the colonial government as well as the early missionaries. In 1951, before the independence of Ghana in 1957, the Convention Peoples Party (C.P.P.) introduced the Accelerated Development Plan (ADP), a document, which spelt out Nkrumah's programme in education. In that document, provision was made for the establishment of technical institutions to teach skills in various trades such as carpentry, masonry electrical installation and welding. These institutions were located at Asuansi, Ho, Kikan (Takoradi), Koforidua, Kpando, Sunyani and Tamale (Foster, 1965). Subsequent educational reforms in the country had all given prominence to the development of technical, vocational and agricultural education. The 1961 Educational Act, The Dzobo Committee and educational reforms in 1972, the Anfom Committee and the 1987 Educational Reforms all emphasized the need for technical, vocational and agricultural education as a way of solving the ever increasing unemployment problems in the country. (Ministry of Education, 2007, Antwi, 1992).

Some aspects of the 1987 Educational Reform, for example, touched on the relevance of the curriculum and placed much emphasis on the technical and vocational education at the Junior Secondary School (J.S.S) level. Tools and equipment were secured for the schools in addition to construction of workshops. Teachers were also given training to take care of the system. Even though much was not achieved in terms of the objectives of the reform, at least the government showed some commitment to provide employable skills for the youth (Antwi, 1992, MOEYS, 2004). The current 2007 New Educational Reform also lays much emphasis on technical, vocational and agricultural education as a means of reducing unemployment among the youth. The reform, among other things, states that there should be a radically transformed emphasis on the quality, quantity and financing of technical, agricultural and vocational education to enable it offer a credible alternative to general education (Arts and Science) for the majority of 15 to 19 year-olds (Ministry of Education, Youth and Sports (MOEYS), 2004). In pursuit of this objective, the following will be put in place.

(i) A National Council for Technical and Vocational Education and Training will be established under the Ministry of Education, Youth and Sports to implement a national post-basic Technical and Vocational Education and Training (TVET) system, to guide policy-makers, and to sensitize the public on the Government's focus on a new vision for Technical, Agricultural and Vocational education and training.

(ii) An enhanced financial base and improved physical infrastructure to reflect Government's new vision for TVET in the country.

(iii) Government will encourage private industry, commerce and services to participate fully in the running of programmes in technical and vocational training at the tertiary level.

Apprenticeship/Skills Training

The large number of the youth who drop out of Primary and JSS school-line, and are, thereafter, left to their own devices about their fortunes in the world of work, is a source of worry to government. It reinforces Government's conviction about the urgent need to restructure the current officially disengaged attitude towards their subsequent participation in the world of work generally and their adult/family life. Apprenticeship to acquire proficiency in the numerous areas of skill, industry and craftsmanship is today dominated by the private sector. Henceforth, it will become a commitment of the state to partner the private sector in a more systematic way to promote apprenticeship programmes. Government will assume full responsibility for the first year of the apprenticeship programme. Government accordingly accepts the recommendations of the Committee and further has decided to:

- Constitute a National Apprentice Training Board, among other things, to oversee and regulate apprentice training and handle issues concerning registration, content, duration and certification.
- Formalize community-based apprentice training schemes in all Districts to cater for the youth.
- Support institutions such as the Regional Technology Transfer Centres (RTTCs) and Ghana Regional Appropriate Technology Industrial Service (GRATIS), Opportunities Industrialisation Centres (OIC), Youth Leadership Institutes, the Private Sector and other organizations including NGOs to increase capacity and expand their coverage and enrolment of apprentices.

The financial commitments, which the state makes to second-cycle education in general education, agricultural, vocational and technical institutions should now be matched by commitments to industry-based apprenticeship and training. (MOEYS, 2004).

It could be further said from the historical narratives that governments of both pre-independence and post-independence had played key roles in instituting technical, vocational and agricultural education in our educational system. The same could be said about the missionaries and individuals who worked tirelessly and continue to work for the establishment of technical vocational and agricultural education for the youth of Ghana.

In spite of all these developments, the technical, vocational and agricultural education in the country had failed to offer a credible alternative to general education (MOEYS, 2004). The same arguments that were mounted to account for the failure of the technical, vocational and agricultural education in the pre-independence era continue to work against the successful implementation of these programmes today. According to (Antwi, 1992; Graham, 1976 & MOEYS, 2004) some of the factors that had worked against these initiatives include the following:

- Ghanaians are of the view that the technical, vocational and agricultural education do not give much respect and prestige as that of the general education (Sciences and Arts).
- They also think that workers in the technical, vocational and agricultural sectors are not mobile enough when it comes to transfers and promotions.
- Others also complain of inequalities in remunerations. They think that their counterparts in the general education have a better deal than them.
- Africans themselves are not interested in manual work. They associate manual work with slavery because of their past history.
- Inadequate workshops and other equipment to facilitate the programmes.

- Lack of adequate trained staff (teachers) to handle the programmes.

Currently, looking at the various educational reforms that had taken place since independence, a lot more of these challenges had been addressed to a greater extent. This means that there are still more to be done and this is evidently captured in the 2007. New Educational Reform of Ghana. Again, one issue that had not been tackled seriously from the colonial era to date is the negative attitude of most Africans, and for that matter Ghanaians, towards technical, vocational and agricultural education (manual work). (Scott, 1938). Most Africans/Ghanaians still prefer to be engaged in white collar jobs instead of working in the field. They prefer to accept even low wages in the offices, rather than field work with higher incentive packages. The numerous educational reforms in Ghana since independence had failed to address specifically this issue. No single educational reform had directly talked about the negative attitude of most Ghanaians towards manual work and the need to address this through public education. The provision made in the Ghana's New Educational Reform (2007) to sensitize the public on the government's focus on a new vision is not the same as addressing the negative attitude of Ghanaians towards technical, vocational and agricultural education. The former is basically addressing policy issues. It is not meant for attitudinal change.

This seems to suggest that the negative attitude of most Africans/Ghanaians towards manual work or fully accepting technical, vocational and agricultural education, after going through the western system of education, has its root from the Traditional African Education. There is the need therefore to have a cursory look at the Traditional African Education system.

Logic in Traditional African Education

The Traditional African Education was the system of education in place before the introduction of the Western system of education by the Europeans. It served as the tool for training the young ones to fit into the society. The mode of instruction was by imitation. It had no formal classrooms, teachers and other facilities and the educands could not read or write as we have today under the Western system of education. Despite these weaknesses, the Traditional African Education system was a comprehensive, functional and purposeful education. It was able to meet the yearning aspirations of the people at the time. There was no unemployment and the system was able to cater for the social, economic and political needs of the people. The communities were largely rural and therefore did not need the system of education (Western) that we have today (Moumouni, 1968; McWilliams & Kwamena-Poh, 1978).

It had already been said that the mode of instruction was purely by imitation and young ones learnt by doing. The young ones learnt on the spot either on the farms or in the work place (forge, kitchen, homes and shrines as the case may be). What happened was that the tools that were used in preparing them were the very ones they used after training to earn a living. There was some kind of logic in the work they pursued after training. One could establish the concept of "Means-Ends-Congruence" in the Traditional African Education. That is to say, for example, that if your father is a farmer, you also end up becoming a farmer. If you are trained as a blacksmith, state drummer or as an herbalist, you end up practicing the same vocation. One could hardly change vocation. That is, the Means (Training/Education) and the Ends (jobs) must correspond (Congruence). This Means-Ends-Congruence and the Logic in Traditional African Education have something to do with the negative attitude of most Africans/Ghanaians towards manual work or vocational, technical and agricultural education. (Moumouni, 1968; McWilliams & Kwamena-Poh, 1978).

Now transferring this “Logic” in Traditional African Education into Western system of education, the Africans/Ghanaians do not or could not understand why after pursuing Western system of education they should settle with manual work. The tools for training under the Western system of education include: offices, classrooms, files, books, papers, pens as well as holding conferences and seminars and so forth. Therefore after pursuing such education under these conditions, the African/Ghanaian expects that they should continue to work under these same conditions after training (education). To the African, and for that matter the Ghanaian, there is no logic between what he or she learnt in school and what he or she is supposed to do on the field of work. They expect that, even as artisans, they should still operate in the offices and continue to “push pen” and do other routine work as they were exposed to during their training (Western education). Therefore, to work with cutlasses, hoes and other farming or trade inputs on the field after formal education is unacceptable and illogical. The perception of the African is that the Western system of education is synonymous with white collar jobs and, therefore, this explains partly why most Africans including Ghanaians have consistently not shown interest or commitment to technical, vocational, and agricultural education despite the numerous educational reforms to promote them.

Discussion

The commitment of governments, missionaries and private individuals from the colonial period to present to promote technical, vocational and agricultural education in Ghana cannot be questioned. There had been various attempts at different times to inculcate into the young ones the need to accept manual work as part of their training (Western education).

One could talk about successes made so far in this direction. In Ghana there are technical, vocational, agricultural as well as polytechnic institutions all over the country to promote technical, vocational and agricultural education. The objective of this strategy is to impart to the young ones employable skills so that they can be self employed or be employed by the state in their quest to contribute to the growth of the economy. Despite these interventions, there are still a large number of unemployed youth in Ghana partly as a result of their negative attitude towards manual work. The 2007 New Educational Reform of Ghana has identified the need to follow-up on the youth to acquire trade even after school. The setting up of a “National Council for Technical and Vocational Training” to implement a national post-basic “Technical and Vocational Educational Training (TVET)” system is a laudable idea and must be commended. By this, the government accepts the weaknesses in the technical and vocational education in the country. The provision of workshops, equipment, curriculum and teachers alone cannot solve the problem. There is the need for supervision and intensification of the programme.

Again, the government also recognizes the fact that the number of hours allotted to students for practical work is not enough. The reform acknowledges that knowledge must be measured with performance. You cannot claim to know if you cannot perform. This brings to mind the concept and philosophy of pragmatism in education. The philosophy of pragmatism posits that there must be clear distinction between “performative knowledge” and “informative knowledge”(Dewey, 1964; Schofield, 1981). The 2007 New Educational Reform of Ghana is guided by this principle. It is hoped that if the TVET is properly implemented, then the youth will partly get committed to the technical and vocational education. It also emphasizes on government-private sector partnership as a way of raising both material and human resources to ensure the successful implementation of the reform. In the past, the execution of educational reforms had been the sole responsibility of government and formal institutions in the country. This

development has achieved little since majority of the populace stay aloof. The commitment of government to bring on board all sectors of the economy even within the local setting is commendable. Under the scheme, funding will not be a problem to the individual youth as the government will aid the state and private institutions to see to their training. The current educational reform also seems to take care of the disparity between the general education and technical, vocational and agricultural education.

One issue, however, that is still outstanding and unresolved is the influence of logic in Traditional African Education on technical, vocational and agricultural education in Africa/ Ghana. The African has failed to recognize the fact that in the Western system of education, there is no strict “logic” or Means-Ends-Conquence” as was the case of the Traditional African Education. The Western system of education is just to supplement or build on the traditional system of education. Scott, (1938) states that:

“The African declined to accept the indigenous system of training as a foundation for his future education. He would regard any suggestion in the educational sphere to build upon the old as tantamount to a refusal to grant him the benefit and opportunities of the purely western forms of training to which he not unnaturally attributed the domination of the white”.

The above statement suggests that the African does not want to do any manual work, which to him or her is associated with slavery. (Scott, 1938). In other words, they want to discontinue with the indigenous system of training but want to apply the “logic” in the Traditional African Education to gain what the Western system of education provides for which, in actual fact, is a misnorma. Again, the African wants to behave like a “Whiteman” after receiving the Western system of education. The question, therefore, is how do we address this challenge? All the Educational reforms of Ghana had failed to capture directly reasons for the negative attitude of most Ghanaians towards manual work or technical, vocational and agricultural education. Instead, the reforms had hammered on the deficiencies in the curriculum as well as human and material resources needed to train the young ones to acquire such employable skills. These efforts are commendable though, but the main problem continues to linger on. How do we get the African and for that matter a Ghanaian to change his or her negative attitude towards manual work or vocational, technical and agricultural education? How do we get qualified graduates at the various educational levels to contribute their quota to the improvement of agricultural, technical and vocational sectors of the economy? Are we still not having old and illiterate farmers still struggling with the production of food in the country whilst agricultural experts are mainly working in the offices? When will these experts dominate the field of operation and translate practically what they have learnt in school into production? Certainly these questions need to be answered if we are to make any headway in our effort to promote technical, vocational and agricultural education in the country.

The discussion so far made in this paper has implications for counseling and administration. There is the need for counseling and administrative interventions. The main issue working against the development of technical, vocational and agricultural education in Africa/Ghana is attitudinal. This is where counseling and administrative strategies play a crucial role. Experts in social/personal guidance (counselling) as well as institutional heads and stakeholders should be able to work on the psychological frame of reference of students/people to understand themselves and to make judicious decisions in this area (Pecku, 1991, Gibson & Mitchell, 1990; Okobiah, 1992 & Olu Makinde, 1987). Therefore, one way of solving the negative attitude of most Africans/Ghanaians towards technical, vocational and agricultural education, which is the

focus of this paper, is to get the government, counsellors and all other stakeholders to be aware of the influence of “Logic” in Traditional African Education on our technical, vocational and agricultural education in the country. The problem must be clearly stated and given prominence in our educational reforms so that specific roles could be assigned to various stakeholders to address this issue. This is in line with one of the principles of Guidance, which states that guiding people is a co-operative effort (Pecku, 1991). This obviously has implications for counselling, policy and policy action.

Implications and Recommendations

Based on the discussion so far, it is clear that the main challenge facing the successful implementation of technical, vocational and agricultural education in the country is the absence of public education on the issue of “logic” in our Traditional African Education and its negative influence on manual work.

It is therefore recommended that:

1. Government and other technocrats, especially from higher educational institutions, entrusted with the responsibility of formulating educational reforms in the country must make sure that right policies and relevant public education are in place to sensitise people on the need to change their negative attitude towards manual or practical work. The public education must disabuse peoples’ mind about the unfortunate “logic” in the Traditional African Education and accept any work at all that may help build the economy. The Counselling Unit of the Ghana Education Service (G.E.S.) and the tertiary institutions must take up the challenge and professionally educate the pupils/students, parents and all stakeholders on the need to embrace manual work or technical, vocational and agricultural education. The G.E.S. must make sure that Guidance Co-ordinators are appointed to the schools. This will make sure that the pupils are educated to enable them appreciate manual work at the very tender age.

2. Parents, specifically, should encourage their children or wards to accept manual work and not to see them as “failures”. The youth will respond to this call when they are assured that their parents will accept them and also give them the due recognition that they give to those who offer general education. This is in conformity with principles of counselling. Respect/recognition is one of the core conditions of counselling and therefore applying this condition will highly benefit the students. Counsellors must make this point clear to parents whenever they have the opportunity. Again, there must also be a policy of parity by government where trade related and vocational graduates receive equal pay and other fringe benefits just like their counterparts in the offices to boost their recognition and commitment.

3. The various heads of institution at the basic, secondary and tertiary levels must give priority and equal attention to all the pupils/students offering the various academic programmes. The system where only weak students are admitted to pursue trade related programmes should be discontinued. Students with good aggregates should be encouraged to also offer the trade-related programmes. A conscious effort must be made by School/College/University Counsellors and Guidance Co-ordinators to disabuse the minds of students that trade related disciplines are inferior.

4. A lot more of practical work should be done in the Schools, Colleges, and Universities. Informative knowledge must give way to performative knowledge. Management in the institutions must ensure that practical work is given priority over theory. This will inspire confidence in the students and urged them to practise the trade-related vocation after school. This requires a

big boost in the provision of qualified personnel and equipped laboratories and workshops by the Government, Non-Governmental Organizations (NGOS) as well as the general public.

5. The Ghana National Association of Psychology which the Association of Counseling is an affiliated member should effect the necessary changes in the students' behaviour as well as change the perceptions of the general public to accept manual work or other trade-related disciplines/vocation as normal and prestigious. National seminars, talks, workshops, symposia and conferences should be organized by the Association in conjunction with the Counselling Centres in the Universities to address this issue publicly.

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The Role of Emotion in Life

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Abstract: *The goal of sociology is to understand the interconnectedness between the individual and the society they live in. More so, how they influence each other and to observe the phenomena scientifically. Focusing on the individual one can broadly categorize the inner personality as having two components, the intellectual and the emotional. The focus of this paper is to explore emotions from a sociological perspective. To try and place the role of emotions within some framework whereby we can gauge our feelings. Although we cannot quantify emotion we must qualify our emotions as a means for understanding them. Furthermore, we can then look to evolve emotionally so as to compliment our intellectual development. This would translate as a complete person. Such a person is most valuable to any society. The basic premise is that emotion is a reaction. A feeling that arises as an effect. This paper will attempt to explore the role of emotion while experiencing it at any given moment. Also, to explore the cause of emotion so as to create the type of emotions deemed desirable and eradicate those deemed undesirable. Having referred to emotion as a reaction it is specifically a reaction (an effect) inextricably linked to our desires. This paper will attempt to illustrate that the appropriate desires engender positive emotions and we can understand this as a vital dimension to individual well being and social harmony. Thus ensuring that emotions are not merely fleeting feelings but that they be harnessed so as to play a role in life and living.*

Keywords: *Emotion, desire, feeling, life and living*

Introduction

One of the intangible and central aspects of human life is the phenomena of emotion. As powerful and affecting as they can be this aspect of human experience is usually not understood by the common person beyond the mere experience thereof. That is, feeling anger or jealousy, love or compassion can all be verified experientially but rarely can one reasonably account for the cause of one's emotions.

Chronologically we can look at emotion from three perspectives. Firstly, the activity that precedes feeling a particular emotion, what to do while experiencing emotion and thirdly, using the emotions we have felt as a means for understanding ourselves better.

Essentially the consensus among sociologists is that a desire/value must be set before emotion can arise. In fact, emotions exist only with reference to experiences pertaining to that which we value. More specifically, whether we are advancing or not towards those values. In simple terms, if I do not have a value for something no emotions can arise.

This paper will explore the fundamentals of emotion. Using a basic illustration as a template we may see the role of desire and our reactions to desire-related circumstances. Furthermore, an exploration of desire as a means for changing emotion. While behaviour modification is a means for curbing emotional impact on oneself and others we must conceive of emotional change itself. This paper will outline the means for changing the nature of emotional experience itself.

Emotion is a phenomenon added to human life which creates a significant dimension to our experiences. When we look at what constitutes “life” we can reasonably generalize that it is a flow of experiences. Given this definition one must explore the factors that constitute an experience as it is the unit we use to qualify our lives.

For any experience a person must have contact. The individual mechanism necessarily must engage in order to declare the experience “of” something. To experience perception there must be external stimuli, to experience understanding there needs to be the knowledge of an idea or concept. Similarly, for the phenomenon of emotion we qualify it by the experience “of” a specific feeling. Stimuli precede perception and knowledge precedes understanding. But the question is what can we preclude with reference to emotion?

From this perspective we presuppose that emotion is in fact an effect, a reaction. Therefore, to understand emotions we must enquire into the preceding activity that is the cause for our feelings. To do this is to add a scientific dimension to emotion by employing a means for establishing cause and effect. Therein, a far clearer picture of the phenomenon of emotion is achieved. As soon as we refer to a cause and effect dynamic we are establishing two distinctly different aspects of the same concept. But there is one distinct difference in the context of emotion.

Where we see a mango seed (cause) we will see a mango tree (effect). This means that cause and effect is the same phenomenon in different stages of manifestation. In the case of emotion this does not apply. Cause and effect needs to be understood differently. Emotion does not cause emotion. Thoughts of a certain type cause emotional feelings of a certain type, but we must remember thoughts and feelings although linked, are not the same. “The cognitive appraisal theory suggests that thinking occurs before feeling. Sometimes emotions occur very quickly, and it is not clear that thinking occurs before feeling ...”. Grieve et al cites a reference that “research suggests that the thoughts occur below the conscious level and therefore thought still precedes emotion” Grieve et al. (2006) pp 33 – 34.

Feelings are the affectations (positive or negative) that arise from our thoughts. To look at thoughts we can broadly say that our thoughts arise from three possibilities. Those are understanding, non-understanding and misunderstanding. The quality of our thoughts is essentially the resultant admixture of these three. This establishes a basic premise that if I want to improve my emotions I need to consolidate that I understand, revise areas where I thought I understood and gain knowledge where I have no understanding.

Ironically, we often refer to emotionally mature people as “very understanding”. Their emotions arise from ideas that have been absorbed and imbibed. The result is emotional equanimity and proportionate feeling.

Emotion as a Reflection

Emotion is an effect, a reaction to something. We can go further and refer to emotions as a means for qualifying our state of mind. Just as we need a mirror in order to see ourselves physically, emotions act as a reflecting medium to see the quality of our mind. In simple terms, negative emotions cannot arise from a positive inner personality. Any feelings that we have, regardless of the surrounding situation or circumstance, is a by-product of thoughts arising from within us. Therefore, in a negative circumstance it is conceivable having positive feelings if we use sound and reasonable thoughts to process the experience.

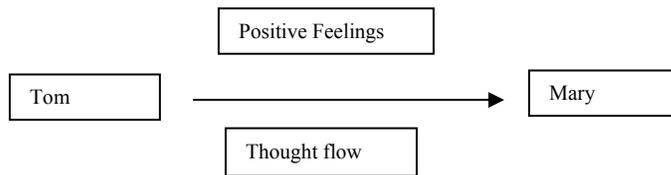
“... [in] the cognitive theory of emotion...[i]t is suggested that the way we think about (or make cognitive appraisal of) a situation results in emotions (Lazarus, 1991). According to the cognitive appraisal theory, the important requirement for the interpretation of emotion is the cognitive

content of the stimulus situation ... In other words, your interpretation (or appraisal) of the situation or event is the primary cause of emotions and can result in you experiencing different emotions.” (Grieve, 2002:33).

An example of how emotions act as a reflecting medium can help us understand the relationship between thought flow and feelings. More so, we can see how a particularized thought flow can take modified forms, which lead to various emotions. Emotions arise when an individual attends to a situation and evaluates it as relevant to his or her goals (Gross & Thompson, 2007). This definition presupposes a chronological sequence of events, involving, first, a real or imaginary situation; second, attention to and evaluation of the situation (appraisal) by the individual; and, third, an emotional response. (Frijda, 1988; Gross & Thompson, 2007).

These basic diagrams illustrate the flow of thought towards others and the attendant emotional modifications. More so, they illustrate that emotions can change as the circumstances related to the same thought flow changes.

Figure 1



Tom is attracted to Mary. His thought flow towards her is positive. His experience of her would be positive. He sees her as a reflection of what he considers positive qualities.

Figure 2

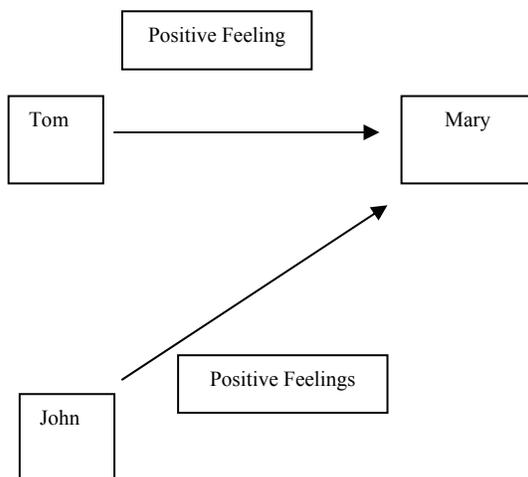
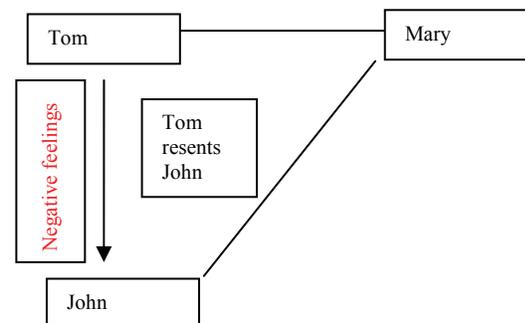


Figure 3



Returning to the idea of understanding, non-understanding and misunderstanding we can explore the illustrations more deeply.

In the 3rd illustration we can see that from Tom’s positive thought towards Mary has also arisen a negative thought flow toward John. One could say that Tom misunderstands John. To be happy

Tom desires Mary to reciprocate the positive feelings. Tom sees John as a threat to this. Therefore, the feelings of resentment towards John are a reflection of misunderstanding John as a threat.

In this final illustration we see that the misunderstanding is caused by Tom's powerful desire to exclusively enjoy Mary's affections. It is this exclusivity that creates the feeling of ill-will towards John. Essentially John is misunderstood as a threat solely because of Tom's powerful thought flow that excludes others. The liberty of John to have the same desire is not only rejected but is not even considered.

With reference to desire we may say that it is a consolidated thought flow towards something that we believe will make us happy. But if we persist with the 3 illustrations we see that Tom's pursuit of happiness through his desire for Mary soon translates as agitation when John is added to the scenario. The obvious question is why did thoughts underpinned by positive feelings modify into negativity in another direction? The answer is selfishness. The self-centered preoccupation with the condition of one's desires leads to indiscriminate thought-flow. McCullough et al. cites Nolen-Hoeksema & Jackson "When personality, social, and clinical psychologists read the word *ruminat*ion, most likely they think of engaging in a passive focus on one's symptoms of distress and on the possible causes and consequences of these symptoms" (Nolen-Hoeksema & Jackson, 2001, p. 37).

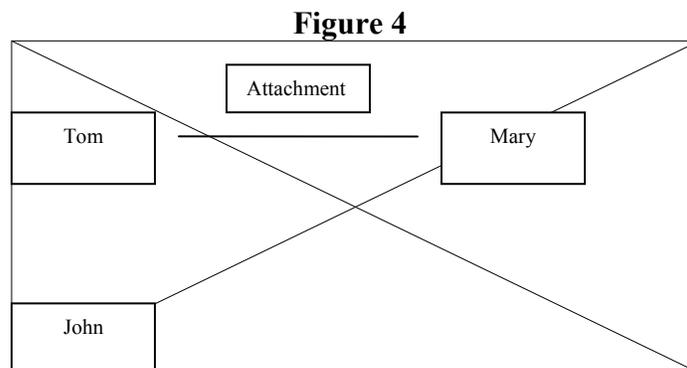
McCullough goes on to say "But ... few recent ideas in personality-social psychology have drawn as much consensus is the idea that rumination is counterproductive for psychosocial adjustment and interpersonal functioning." McCullough et al. (2007) p. 490.

The fact that a person pursues an object or being with the idea that the happiness therein should be for them, to the exclusion of others, is the foundation for putting oneself at odds with the world. Feelings of negativity are being caused by the quality of the thought, which could be described as selfish due to the fact that the person's thought flow towards happiness does not consider the happiness of others. In fact selfish desire denies anyone to share your individual enjoyment.

In psychological terms this translates as a mental friction, resistance to others. *Any resistance to others could translate as a negative emotional feeling.*

Emotional Modifications

What Tom would call love is merely an emotional attachment. *A thought-flow that does not identify with Mary but rather his own personal needs, which are fulfilled through her.*



In the case where Tom's desire to win Mary's affection are successful there is a potential for attachment. That is, the powerful thought to obtain Mary as a partner could modify into the desire to possess and control her as a means to ensure the relationship persists. The effect is two-fold;

- a) Her independent movement will be a cause for agitation to Tom as it conflicts with his need to possess and control her.
- b) Mary will be resistant to being possessed and controlled. The result would be a desire to end the relationship.

Figure 5

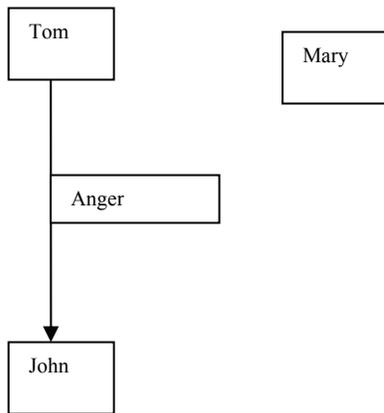
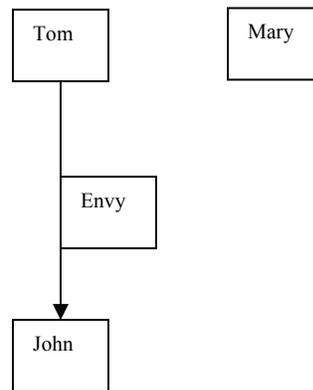


Figure 6



In illustration 5 we see that Tom becomes angry with John. Anger arises as a modification of desires being seen as interrupted. Tom sees John as an interruption in his desire to obtain the exclusive attention of Mary.

In the scenario in illustration 6 there is a feeling of envy towards John because he has succeeded in winning Mary's affections. The emotional affectation of envy arises when we fail to fulfill a desire and allow that un-fulfilment to modify as negativity towards those who have achieved the same, or equivalent, desire.

All of these negative emotional affectations are founded on one basic theme. That is, Tom rejects the various possible outcomes by referring only to his desires. In fact, any outcome that does not translate as his own fulfillment produces negative emotional modifications. In short he has not considered anyone's happiness but his own and in this scenario "the activities of at least two persons are directed towards getting the same reward, and, to the degree that one of them is successful...the other is denied". Interestingly it is not the feeling of competition but the anticipation of success that create the negative feelings."...- the firmer the anticipation the more violent the anger-..." (Smelser 1970:51)

Continuing with the idea of emotion as a reflection we see through the illustrations that feelings directly arise from thought flow. More specifically, we can observe that feelings are the mental affectations related to desire. This obviously establishes one fundamental principle and that is, in order to change the quality of my feelings I must change the quality of my desires.

Tom may conclude that it is reasonable to bear resentment towards John for sharing a desire to enjoy Mary's affections. But we see the very premise is flawed as he neglects to consider that the transaction of Mary's affections will be decided by Mary. This fallacy in understanding produces invalid emotions. If the scope of Tom's perspective went beyond himself and his desires he

would gladly accept the laws of attraction as an addition to his social framework and surely feel empathetic towards John. In fact, he would feel an affinity with John with reference to Mary being attractive. With this perspective that goes beyond the immediate dynamics of a situation we can avoid what is called 'the false cause'.

Therein one establishes a cause and effect dynamic based on the immediacy of temporal succession "after the thing, therefore because of the thing". For example, in hearing we did not receive a promotion we also soon hear about the successful candidate. We posit them as the "cause" for our failure. This is due to the immediacy of the news but in reality the cause of not receiving the promotion is merely that one was not good enough. This example of the "false cause" concept indicates how a misunderstanding of events is created due to reason being clouded by the affectations that can accompany powerful desire (especially if they have been interrupted or thwarted).

Emotion Regulation

Virtually all of life's experiences are pervaded by emotion. Response tendencies in individuals are inextricably linked to social and cultural contexts (Gross, 1998b), and thus emotion regulation should be of significant interest to social psychologists and theorists in developing models of human social behaviour. Emotion regulation as defined by Ochsner & Gross (2005, pp.242-243) involves "the initiation of new, or the alteration of ongoing, emotional responses through the action of regulatory processes." Whether the experience and accompanying emotion is perceived as positive or negative, some level of emotion regulation is necessary in all situations in order to be able to successfully manage day-to-day living and respond appropriately to life's changing situations. This regulation can be automatic or controlled, unconscious or conscious (Gross, 1998b; Mauss, 2007). *In this paper, only the consciously applied aspect of emotion regulation is considered.*

The effect of emotion regulation can be either positive or negative depending upon the method employed. Two emotion regulation methods are cognitive reappraisal and behavioral regulation. A brief description of these common emotion regulation processes follows.

Cognitive Re-appraisal

Because an emotion arises from the evaluation of a particular situation with reference to one's goals, this presupposes an appraisal of the situation. This is known as the cognitive appraisal theory of emotion. In this theory, one's "interpretation (or appraisal) of the situation or event is the primary cause of emotions and can result in [one] experiencing different emotions." (Grieve et al., 2006, p.33).

Cognitive reappraisal involves "construing a potentially emotion-eliciting situation in a way that changes its emotional impact." (Gross & John, 2003, p.349). Essentially, the individual reconsiders the situation in the light of new or additional knowledge that was not available when the situation and subsequent emotion was first experienced. The reappraisal of the situation can thus "give rise to a totally different cognitive appraisal, emotion, and direct action" (Grieve et al., 2006, p.34). Thus the cognitive appraisal theory can be applied to reducing emotional impact, or to changing the emotion itself. The very question of reappraisal does not arise if one has no mitigating knowledge to apply to the situation. "Knowledge and experience work together...When we learn new knowledge and memorize that novel information, we then have the ability to be more prepared....Knowledge, then, is the precursor of experience" (Dispenza 2007:202). If the concerned experience is emotion and we are conceiving of changing them then our preceding

ideas must necessarily change. However, one may be in possession of mitigating knowledge, but neglect to apply this knowledge at the time. Later one can come to understand that they could have applied their knowledge.

Not only does the theory presuppose an appraisal of the situation, but also a concern or goal against which this appraisal is applied. This concern or goal represents a desire entertained by an individual. If reappraisal of a situation with respect to a particular concern/desire can be considered an emotion regulation technique, then so too can the reformulation of one's desires. One's personality, as both an inward experience and an outward expression, is necessarily influenced by desires. The French psychoanalyst and psychiatrist Jacques Lacan concurs with Spinoza's assertion that "desire is the essence of man" (Kordela, 2007, p.13). The strategy of desire reformulation thus affords greater scope for the individual to rehabilitate their personality: eradicating the experience and expression of negative emotions, which are correlated with anxiety, depression and other physical and mental disorders (Grieve et al., 2006; Watson et al., 1988); and inculcating positive emotions, which "encourage personal growth and social connection" (Grieve et al., 2006, p.36).

Reappraisal has been associated with improved relationships (Gross & John, 2003), enhanced subjective well-being (Gross & John, 2003; Gross, 1998b), and decreased negative affect (Gross, 1998a; Gross & John, 2003; Ochsner & Gross, 2005).

Behavioral Regulation

Behavioral regulation, or expressive suppression, is a response modulation that involves "inhibiting ongoing emotion-expressive behavior while emotionally aroused." (Gross, 1998a, p.226). Expressive suppression is the inhibition of articulation while affected. When done without a reasonable understanding as to why, negative effects are various.

Expressive suppression does not reduce the unpleasant experience of negative emotions (Ochsner & Gross, 2005), and has been associated with a number of acute and long-term deleterious effects including increased anxiety and lower self-esteem and subjective well-being (Butler et al. 2003; Egloff et al. 2006; Gross & John, 2003) and impaired communication and social functioning (Butler et al. 2003; Gross & John, 2003).

However, in certain cases, in which expression would be significantly damaging, expressive suppression may be the only option (Gross & Munoz, 1995). From a more positive perspective, emotion inhibition has been highlighted as an important aspect of psychological development [Kopp, 1989; Saarni, 1990; Thompson, 1991]. As Bonanno et al. (2004) have shown, long-term adjustment depends upon the flexibility to employ the emotion regulation strategy that the situation demands. Ultimately, "Emotionalism upsets your intellectual balance and poise. Passive subservience to emotion ruins your material and even spiritual wellbeing" (Parthasarathy, 2004:88)

It is when expressive suppression has become mere habit, or is employed without understanding of the reason, purpose or benefits of the strategy that it will continue to extract the previously mentioned personal and social costs. However, as one comes to understand both the beneficial and detrimental outcomes of expressive suppression to particular situations, a greater awareness of oneself and emotions is gained, and the process of emotional rehabilitation can commence.

A parent who suppresses the uncontrolled feelings of intense anger towards a young child is of course adopting the most beneficial approach. Personally reflecting to further understand this approach, the parent reasserts the potential harm of anger expression to the child. Investigation into the negative external consequences and internal agitation of the situation paves the way for

an investigation into the anger as an effect, its causes, and possible solutions. Because cognitive reappraisal can be employed before the emotional response is underway, its application implies some level of mental preparedness or conscious awareness of potentially emotion-eliciting situations. This arises from personal reflection of one's previous experiences, and the possible causes and effects. Thus internal reflection is particularly important in the process as it equips the parent with knowledge of their own emotional propensities.

As one becomes established in a greater understanding of appropriate and inappropriate emotion-expressive behaviour, this understanding is available as mitigating knowledge to be applied to future situations as a reappraisal strategy. Hence, expressive suppression can be considered to be an initial coping strategy.

Avenues for Emotional Growth

While reappraisal is clearly preferred over expression suppression, it is important in the context of one's continued emotional development to take in a realistic view of emotion regulation. This requires taking in knowledge that will enable a broader perspective of life experiences, and create a new, enhanced world-view. This new knowledge paves the way for new experiences and new emotions. As Dispenza (2007, p.206) states, "knowledge is the precursor to experience. When we learn new information and apply what we learn by modifying our behavior, we create a new and more enriched experience. Because emotions are the end product of experience, the result of our intentional actions should produce a new experience with a new emotion."

The personal reflection, the intake of knowledge and its subsequent application to one's field of emotional experience requires the cohesive functioning of the emotion and reasoning faculties that lie within the human personality. As Gross (1998b, p.288) states, "cooperation between reason and emotion brings our actions into line with our enduring concerns, motivating and sustaining action directed towards longer-term projects in the face of temporary setbacks".

To possess this balance of reason and emotion is to be equipped with emotional intelligence, which encompasses the ability to be aware of and control one's emotions, and to use and express them wisely. Emotional intelligence "provides the link between feelings, character, and moral values" (Grieve et al., 2006, p.40).

Desire as a Means for Emotional Change

The universal factor in human life is the existence of desire. This is the term describing the thoughts flowing towards that which we project will give happiness. In simple terms, if we fulfill a desire we are happy and the attendant emotions will be happily experienced by that particular person. If we are thwarted we will experience the negative feelings inherent in unfulfilled desire, which is the denial of happiness.

Having defined desire as a consolidated thought flow we can infer a significant investment has been made in achieving a certain end. As our emotions arise from the evaluations we make of scenarios related to our desires we can certainly curtail and govern emotion when our evaluations are sound in basis. But as Socrates explained; man is a man by virtue of possessing reason but not all men are reasonable. This lays the foundation for another aspect of understanding the role of our emotions in life. That is, while we may learn new means for evaluating situations directly and indirectly related to our desires, a paradigm shift in perspective comes when desires themselves change in nature. *Meaning, reason is applied to changing our understanding of happiness itself.*

A basic distinction used with reference to desire is the ideas of selfish and unselfish. Immediately one can conceive of a situation where the emotional feelings would be different even if the dimensions for evaluating a situation were the same.

A selfish person would engage in the pursuit of happiness with underlying (and unavoidable) concerns about others facilitating or obstructing their path to fulfillment. People with similar desires would be seen as a threat to happiness. The thought that others' successes could directly impinge on theirs is a cause for reactions (effects) like resentment, competitiveness, fear etc. (as illustrated earlier). This arises from the one central theme of a selfish person; any happiness achieved in their activities is not only to be enjoyed by them alone but they will actively exclude others from sharing their experience. Moreover, they certainly cannot feel a vicarious happiness by identifying with the successes of others.

Selfishness is nothing but a means, a method employed for achieving well-being, to say it is "bad" etc. has limited meaning. But we can see it as a fundamentally flawed method. The central cause for this is separateness, an unavoidable effect of self-centeredness. In the context of sociology this means a person will fail to experience integration, acceptance, empathy etc which are all vital to individual and group harmony. Essentially a selfish person will feel displaced, isolated and ultimately alone.

Remaining focused on the theme of individual harmony we must explore the idea of unselfishness as a superior means for happiness. Having previously commented on the self-centered, ego-centric outlook of a selfish person we can infer that unselfish is the antithesis of this.

A reduction in self-absorbed pre-occupations allows the individual to explore happiness through other means. That is, to achieve the goal of inner harmony by increasing our joy content through learning to incorporate the desires, needs and traits of others into our life. More so, to be proactive in our own efforts to intelligently assist and facilitate other's also. This is done with the underlying knowledge that in sheer mathematical terms our potential for positive emotion is increased to the extent the happiness of others is incorporated into our own sense of well-being. John Stuart Mill associates unselfishness as another utilitarian means for happiness wherein it "directs us to promote the happiness (pleasure) of every person... not just our own happiness... I am to give equal weight to everyone's happiness, and am not entitled to give special consideration to my personal well-being," (Stumpf and Abel 2002:392)

Nietzsche concurs by stating that the motivation of all human actions is "to satisfy a desire." Meaning unselfish actions are not done for others to the detriment, but rather to compliment, our emotional well-being. (Stumpf and Abel, 2002:402)

Using a basic example of group psychology we may see a practical scenario where the merits of unselfish desire are validated;

You are included in a group of people but your desires and interests are selfish. All other members will be qualified on the basis of the potential for positive/negative roles in achieving your personal ends. This one-dimensional approach leads to a "with me or against me" mentality. Conflict is virtually assured.

The group members, upon perceiving this mentality will be less inclined to facilitate you knowing that your selfishness will prevent you from reciprocating the very assistance you expect from them. Of course, a selfish person will resent such "non-cooperation" in others.

In the same setting an unselfish person will be happily accepted into the group by virtue of his willingness to integrate their goals with that of other group members. This willingness to integrate immediately establishes a harmony. More specifically, an unselfish desire will give rise to further harmony inducing emotions. "Positive emotions like joy, love, and acceptance are usually

experienced as pleasurable and rewarding. Positive emotions may create an urge to be creative, to explore, to seek new experiences, and to grow. In short, positive emotions encourage personal growth and social connection. A capacity for having positive emotions is a basic human strength...”

Grieve et al (2006: 35, 36). This starts a positive cycle wherein “Feeling connected to others increases psychological...well-being...a sense of connectedness also increases empathic responding as well as acts of trust and co-operation...,which tend to have mutually reinforcing effect: they beget trust and cooperation in return...” (Hutcherson et al 2008)

“Empathy means understanding fully...Empathetic openness allows you to be aware of various people’s positions...Empathetic openness not only allows you to understand others but makes you more sensitive to what they are experiencing. This encourages people to say what they need to say and facilitates communication...” Grieve et al. 2006: p 12.) Furthermore, an unselfish person can experience positive feelings vicariously. That is to be happy as result of another group member’s happiness. This is the effect of unselfish desire, a thought flow related to feeling happiness that does not exclude, but rather includes, others achieving success in their desires.

Desire as a Means for Happiness

It is obvious that the projected ends for a desire would be a greater feeling of happiness. This does not need to be taught as it is instinctive and intrinsic in all beings. What can be learned are the various means for obtaining happiness. However, the means for happiness are not intrinsic or instinctive. We must learn how to be emotionally contented and happy. Therefore, we must see desire as a means to an end and that end, in this context, is a persistent and meaningful sense of emotional equanimity. Hutcherson et al poses the question “How can we increase feelings of connection at an automatic level, most crucially towards those not yet with our circle of trust?” (Hutcherson et al 2008:720). In curbing negativity the point of concern is known i.e certain values pronounce certain activities as wrong. “...however, Western science has only recently begun to recognize the benefit not just of counteracting negative, antisocial emotion, but also *fostering* positive prosocial emotions and behaviors. Even when highlighting the important role of positivity in counteracting implicit negativity, most studies leave unanswered the question of how to generate such positivity in the first place.” (Hucherson 2008:720)

Viewing desire as the means for the paradigm shift in perspective with reference to emotion is of prime importance. The reason for this is because every significant aspect of our lives is preceded by desire. Accepting this, we must view desire as the fundamental cause for the effect called emotion.

Given that one cannot simply “be” compassionate, patient and loving etc we can safely assume that to obtain positive emotions we must at least desire them. One must desire to be compassionate etc. Once again it begs the question, how do I develop the desire and conviction to genuinely aspire to such positive emotional traits?

The answer is that we must clearly correlate positive emotion with happiness. “...no-one ever neglects anything which he judges to be good, except with the hope of gaining a greater good.” (Durant 1962:167) One must be convinced that patience brings more happiness than impatience, tolerance over intolerance, sharing over greed. A vital role that emotions play in our lives is that they act as revelations to our own thought patterns. Our irritation with colleagues may reveal to us our unrealistic expectation of others, our ability to identify with another’s perspective reveals our empathy. In both cases there is a desire at play. The first is causing agitation as one’s person-

al desires are projected onto others. The result being that the desire, rather than obtaining happiness, achieves a contrary result.

Experiencing the internal and external benefits of empathizing with another reveals the merits of unselfish desire. The desire to identify with another's perspective as a means for happiness is proven. More so, the example contains the fundamental principle of positive emotions, and that is harmony. When one is in harmony one feels more complete.

From the external perspective this is obvious. Any individual desirous to integrate oneself into a community willingly dedicates one's actions to the group to achieve acceptance, belonging etc. There is also the individual happiness that arises from service-orientated action, a positive feeling inherent in giving of oneself for the benefit of another.

Studies indicate that happiness and satisfaction are enhanced when peoples goals are..., concerned with community contribution, emotional intimacy and personal growth..."(Lyubomirsky 2001:241)

Intellect and Emotion

The theme of harmony is often associated with peaceful co-existence. Furthermore it can also be taken to be the pleasing effect of various parts being in concordance. With reference to inner harmony the commonly accepted ideal is symmetry of reason and emotion. When our emotions arise from reasonable ideas as well as the experience of emotion being dealt with reasonably, we have the pleasing effect of inner harmony.

The harmonious correlation between emotion and reason is encapsulated by Spinoza who states " By emotion (affectus) I understand the modifications...,and at the same time the ideas of these modifications" (Durant 1962:166).It is important to note that emotions arising from reason and emotions experienced reasonably are similar but are not synonymous. Patriotic emotions may arise from reasoned conclusions related to one's nation. But once the feelings of patriotism are instilled one must also ensure that these nationalistic feelings are reasonably expressed. In simple terms it may be reasonable to feel patriotic but it is not reasonable to allow that feeling to take us over wherein we become unreasonable (as per the maxim of Socrates previously mentioned.) Herein lies the crux of inner harmony; the development of the intellect to observe, govern and guide our mind's emotions. In this context "...a certain narrowness of outlook leading not infrequently to a kind of fanaticism" is likely if our intellect is neglected. If we are objective, impersonal "...they help a man maintain a certain sense of proportion" (Russell 1932:222). As previously mentioned one cannot simply be compassionate or patient by merely thinking it. Even negative feelings like anger cannot be produced without cause. This is why we often hear the term "learn" when referring to emotional development; "I must learn to control my anger" or "I must learn to be more compassionate". This demonstrates clearly that there is an aspect of knowledge that must be learnt and imbibed for emotional development to arise as a natural consequence.

"Unfortunately, objective and dispassionate appraisals...may be relatively rare and difficult. Cognitive judgments are often clouded by emotion (Haid,2001)

Aristotle associates human virtue with optimum functioning and in this context states that "...desires are not *in themselves* rational but since they can,... *be controlled by* reason,..." the highest character is wherein "...our desires and emotions...obey the voice of reason" (Stumpf and Abel 2002:348-9).

This indicates that the role of emotion is integral to a complete, fully integrated person of virtue. But the overriding qualification is not good or noble sentiment but their governed expres-

sion. Continuing with this reference the conclusion encapsulates the role of and the importance of cognitive symmetry.

Since happiness consists in acting rationally and since acting rationally means acting in accordance with human virtues, happiness can be defined as activity in accordance with the intellectual and moral virtues. In other words, a happy life is one in which we do rational things well in which we use the intellectual virtues to think well, and in which we use the moral virtues to enable us to respond reasonably to our emotions and desires.

Returning to Spinoza we see “The decisions of the mind are nothing save desires, which vary according to various dispositions (Durant 1962:164-5). The disposition could be intelligent or unintelligent, selfish or unselfish. The ideal disposition, as previously advocated by Aristotle and Mill, would be an intelligent and unselfish disposition which would achieve the goal of desire that is, put simply, to feel happy.

Herbert Spencer suggests we do not waste the intellect on merely deliberating over rival impulses (Durant 1962:326) but that we heed the words of Schopenhauer and use the intellect as “...nature has produced it for the service of the individual will” (Durant 1962:275). This means we must apply our intellect when we develop the will to utilize and nurture emotions in a way that complements our growth in happiness.

The development of our intellect can only be through the introverted process of personal reflection. Therein, we invest the time to expose ourselves to the knowledge related to higher values, themes beyond self-centered concerns. From the perspective of sociology any positive or negative phenomena in society is due to the resultant effect of individuals. Therefore what each person must apply themselves to is that which is under their jurisdiction. This begins with one’s own personality.

Conclusion

The phenomenon of emotion is central to the creation or destruction of boundaries. One can choose to feel a oneness with others by allowing emotions of identification to express. Or, one can cultivate emotions that engender a sense of separateness. The role we assign our emotions, or more so, the direction we allow our emotions to take will be governed by the desires we cultivate. If we do not review and revise our understanding of ourselves and our obligation to imbibe healthy means for happiness we face destruction through “...self-centeredness, selfishness. This is the death knell of..., wisdom and culture of the human race” (Parthasarathy, 2007:89).

By independent reasoning and personal reflection we can cultivate the tendencies of perspective, self-governance and empathy. With such a disposition emanating from the intellect we can ensure that the emotions arising from our mind play a positive role in our individual life and societal roles.

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Accounting for the Determinants Affecting the Rise of Rural Non-farm Sector in India

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Abstract: *The study shows, that the shift of the farmers from farm activities to non-farm activities is not a myth it a reality. Growth in non-farm activities was the of not only push or distress induced factors like fragmentation of land, financial indebtedness crop cultivation becoming an increasingly investment-intensive activity demanding mechanization, more investment is better quality manures, and seeds, pesticides, which is difficult to afford specially with agricultural crops seeing only modest prices but also due to more positive or pull induced factors like growth of literacy, job opportunities and increased demand for non-crop food and services.*

Keywords: Non-farm activities, pull factor, job opportunities

Introduction

The Situation Assessment Survey of the farming community, commissioned by the Ministry of Agriculture and carried out by the National Sample Survey Organization, bring out the pathetic condition of India's farmers, be it in income, expenditure, indebtedness Farmers are committing suicide and migrating to the cities in search of livelihood. Why does this happen to the farmer? Why do farmers take this extreme step? Is income from cultivation not enough to meet consumption and other expenditure? Are farmers heavily indebted due to falling income from cultivation and increased cost of cultivation? Or are farmers not able to cope with the new competitive environment after economic reforms? Answer to these questions can be found from the survey initiated by the Union Ministry of Agriculture, which is known as the Situation Assessment Survey (SAS). For the first time, as a part of the millennium study, the Ministry of Agriculture initiated a comprehensive socioeconomic survey of the farmers covering educational status, levels of living, farming practices, possession of productive assets, awareness and other relevant issues. The National Sample Survey Organization (NSSO) carried out the SAS of farmers during 2003 (January-December) covering 51,770 households spread over 6,638 villages across the country. The survey reports have already been released in five different volumes, namely, (1) Independence of Farmer Households, (2) Access to Modern Technology for Farming, (3) Some Aspects of Farming, (4) Consumption Expenditure of Farmer Households, and (5) Income, Expenditure and Productive Assets of Farmer Households. The results of these surveys show the dreadful condition of farmer households be it in income, expenditure or indebtedness of farming households.

The annual net income for the farmer households is less than Rs. 1,000 per farmer household in Orissa, UP and West Bengal. One of the SAS reports also indicates that given a choice, 40 per cent of the farmers would quit agriculture and take up alternative occupation [NSSO 2005 : 11] The results of SAS sufficiently prove that farmers are not getting enough remuneration for their produce.

Our understanding of livelihoods and poverty has undergone considerable change over the last few decades and this has implications for the way in which we define, research and analyse these concepts. In the 1970's the focus of poverty analysis was on income and in rural areas, this was assumed to be income from agricultural activity only. But, more recently, there has been an increasing preoccupation with more holistic views of poverty and a recognition of the fact that a plethora of activities make up the livelihoods of the rural poor. This can, and often does, involve acknowledgment of the many non-agricultural activities that are carried out by poor people in

rural areas. Definitions of the rural non-farm economy are problematic. There is no standard definition either internationally or within India as the sector is too diverse to allow neat classification (Fisher et al., 1997). The rural non-farm economy is defined in this paper to exclude primary agriculture, forestry, fisheries, but to include trade and processing of these products, in addition to other goods and services, as secondary and tertiary sectoral activities.

Research has shown that diversification is not necessarily a strategy pursued by poor people, nor is it just about coping. For some people it can help in mitigating risk or coping with vulnerability where risk remains high and in setting poor people on a cumulative path towards greater livelihood success (Davies, 1996). In addition to reducing the risk of livelihood failure (Gill, 1991; Alderman and Paxson, 1992), diversified livelihoods can also help to reduce income and consumption fluctuations due to seasonality in labour demands (Morduch, 1995), offset the impacts of natural risk factors on staple food availability add activities more added value to the household livelihood portfolio (Von Braun and Pandya-Lorch, 1991), provide cash resources that enable household assets to be built up, and help people to hold onto the assets they already possess (Netting, 1993). Diversification across income sources helps households to combat instability in income and thereby increases the probability of their maintaining livelihood security. Poor people build diversification strategies sensitive to their context and livelihood strategies.

The absolute dependence of households on land as an asset is now virtually a thing of the past. Brick kilns now dot the countryside, especially along the all-weather roads, and have come as a saviour to the agricultural labourers. Construction activities and rickshaw pulling in cities have come handy and now in the bigger cities one can find several places where labour markets are held daily-in the morning, labourers *from* villages congregate and those who want to engage them *for* the day come and engage them.

Agricultural crops saw only modest price increases compared to non-agricultural products. At the same time, both the costs and risks involved in the cultivation of coarse cereals, irrigated paddy cotton and oilseeds increased. Farmers also faced increasing operating costs as the price of inputs rose. Competition *for* land and the reduction of communal areas increased the costs associated with keeping drought animals because fodder became more expensive. At the same time, richer farmers invested in tractor which was leased out to other farmers at a price that was less than the maintenance costs of animals. The outcome of the factors outlined above meant that crop cultivation became increasingly investment-intensive activities. Investment requires capital and entrepreneurship with fragmented land holdings, poorly defined property rights, and lack of infrastructure in agriculture and transition from traditional land-based to capital-based agriculture which is a time consuming process. Whilst agriculture remained the most important source of income for the majority of rural households, the debates about rural development attach increasing importance to the rural non-farm sector. It is recognized that traditionally rural households in developing countries have been viewed as though they were exclusively engaged in agriculture, but there is mounting evidence that the rural households can have highly varied, often multiple sources of income. Rural households can and do participate in a wide range of nonagricultural activities along side the traditional rural activities of farming and agricultural labourers. Such non farm income can contribute significantly to total income of farming households in India. Thus process of diversification of the rural economy, howsoever slow, has set in which has helped the agricultural labourers to find job opportunities outside agriculture.

Amongst policy makers there is a considerable interest in gaining a better understanding of how the rural non farm sectors contributes to economic growth and what, if any, specific role does it play in alleviating rural poverty. Now it is clear that the land-based agricultural sector

alone can not sustain rural growth & urban centers cannot be assumed capable of supporting a consistently high influx of migrants, given the present state of infrastructure and capital assets. Therefore heightened focus on poverty alleviation demands closer scrutiny of the livelihoods of the poor, because policy prescriptions for virtuous development of rural non-farm sector are presently few/weak, lacking sound empirical foundation.

In spite of a great deal of research that has been carried out, our understanding of the rural non-farm sector, particularly its role in the border development process is weak and does not provide adequate insights to our policy makers. Therefore there is an urgent need to understand and study the specific requirements of the sector so that these can be better integrated into policies and strategies at various level that will help in effective poverty reduction and equitable growth and result in the 'virtuous growth' of rural non-farm sector. The present study however accounts for some of the various factors that either foster growth of rural non-farm sector or hinder the growth of non-farm sectors through a case study covering villages of three districts of West Bengal.

Literature Review

In colonial days agricultural labour households were wholly dependent on the landowning for survival. As agricultural productivity was very low, peasant households also faced grim poverty and the agricultural labourers' plight was beyond description. Semi starvation conditions prevailed throughout the year, save a few weeks after the harvesting season. They were subjected to all types of exploitation and were forced to perform 'begar', i. e., forced labour, by the zamindars. In the lean season of August and December they literally starved.

Due to fluctuations in real income from cultivation, households have developed an increasingly broad repertoire of livelihood activities. There has been both a change in cropping patterns (increasingly towards commercial crops in the context of liberalization, infrastructure development and government food distribution policies) that represents diversification within agriculture, and diversification into non-farm activities, especially labour migration to the non-farm sector. There is a growing recognition that non-agricultural activities in rural areas play a crucial role in providing simple consumer goods and services to the rural households. Such activities also provide a humble, but critical income to the landless labour.

The experience of economic growth across countries suggests that high agricultural growth is generally accompanied by the growth in the rural non-farm sector owing to its forward and backward linkages with agriculture, specifically, there are 'forward' linkages from the rural non-farm sector where rural non-farm outputs serve as inputs to agriculture such as manufacture and repair of agricultural implements, transport, distribution of fertilizer, etc. Also there are 'backward' linkages from non-farm sector where this sector provides a demand for the output from agriculture, for example, processing of gur, tobacco, sugarcane, cashew nuts and flour. Chuta and Liedholm's [1979] review of rural non-farm employment cites a number of studies which have shown that such backward and forward linkages between rural non-farm sector and agriculture are quite strong.

Papola [1987] found that the performance of rural non-farm sector in different states was broadly related with the levels of agricultural productivity and more closely with the growth rate of agricultural output. Rise in income levels, purchasing power and to an extent the 'invisible surplus generated by agricultural growth' led to the emergence of non-farm activities.

However the international experience during the pre and post reform period of the 1980's and 1990s provide a mixed and even a contrasting picture about the backward and forward linkages between rural non-farm sector and agriculture. Rao (1990) observed that China witnessed a very

high growth in both farm and non-farm sectors in the post reform period, on the other hand Thailand recorded an impressive growth rate in agriculture during 1970's and 1980's but the rural non farm sector did not perform well. Nevertheless the significance of rural non-farm sector cannot be underestimated. There is a growing recognition that non-agricultural activities in rural areas play a crucial role in providing simple consumer goods and services to the rural households. Such activities also provide a humble but critical income to the landless labour [Kilby and Liedholm, 1986]

There is evidence from many countries that the extent of secondary employment in non-farm work also is extensive and important for small and landless farm families [World Bank, 1978]

Internationally the post reform period witnessed a significant rise in rural non farm activities undertaken by rural households. Data for selected countries in Central America and the Caribbean, West and East Africa, South and South-East Asia and China show that the share of rural non agricultural workers in the rural labour force ranged from 10 to 26 per cent in 1980 [International Labour Organization, 1983, pp 15-19]. This share also rose significantly; in fact it more than doubled, over the period of three decades from 1950 to 1980 in all these regions (Unni 1991). Besides various micro level studies have been carried on by researcher's world wide justifying the rapid growth in non-farm activities especially in the post reform period.

Anderson and Lieserson (1980) studied the growth of rural non farm employment and examined the role of rural non farm activities in the development process and their linkages with agricultural growth in developing countries.

Jones (1984) studied the off farm employment which have distinct spatial patterns and have shown that off-farm employment is an alternative way of diversifying income and reducing risk.

Kiloy and Liedholm, (1986) showed that agricultural income fell from 60 to 53 percent in most of the third world countries, 70 per cent of the increase in real household income during the same period was attributed to the rise in non-agricultural incomes.

Lanjouw and Lanjouw (1995) studied the role of rural nonfarm employment to the broader development process in terms of absorbing growing labour force, slowing rural urban migration contributing to national income growth.

Recent evidence from Sri Lanka, India and other developing countries illustrates that the share of household income from rural non-farm activities is growing. 'Recent studies (Barrett *et al.*, 2001; Lanjouw and Shariff, 1999; Reardon *at al.*, 2001 Seddon and Subedi, 2000; Senanayake *et al.*, 2003) suggest that non-farm sources account for 30-40 per cent of the average rural household income in South Asia and 57 per cent in Sri Lanka.

Karatyan, Janowski (2003) studied whether the non farm activities provide a social safety net to the impoverished rural population of Armenion villages Choi (2001) studied the policies and measures for promoting rural non farm employment in Asia. Wandschneider (2003) studied the access to rural employment by poor developing economies and post socialist transition economies, focus being on Uganda, India, Armenia, Georgia and Romania and found, diversification into non farm economic activities out of necessity (distress - push) was very common 'Arauto (2004) explored the impact of non-agricultural rural employment on poverty in Mexico Arauto (2003) explored the determinants of participation in off-farms non agricultural employment using data for rural Mexico. Davis and' Bezemer (2004) examined the key emerging and conceptual issues in the development of rural non farm economy in developing countries and transition economies.

Ferreira and Lanouw (2000) investigated into the importance of non-agricultural activities in the Brazilian North East.

Cannon and Smith (2002) studied the factors that operate at the household level to enable people from engaging in beneficial non farm activities in Uganda. Mduna and Wobst (2005) studied the factors that determine the ability of the rural households to participate in rural non-farm activities in Tanzania.

“It is a historically unique fact that over the last six decennial censuses in spite of impressive development of the large scale manufacturing and infrastructure sector, the share of agriculture in the work force has not diminished at all. It was 73% in 1921, 73% again in 1961 and 73.8% in 1971. The figure for 1971 is in fact, slightly higher than in 1961” (GOI, 1978, P-82, Planning Commission document August 1977). This “historically unique fact about India has now changed. The figures for 1999-200 given by the National Sample Survey’s 55th round show a marked shift in the structure of employment in India. A comparison of the 1999-2000 estimates with those of 1961 brings out the shift away from agriculture.

Indian experiences about the growth of rural non farm activities in the pre and post reform period give us a contrasting picture. The rural non farm sector employment increased from 16.6% in 1977-78 to 23.8% in 1999-2000 which is an indication of the fact that there has been a remarkable shift to non farm activities by rural households in India in the post reform period as compared to pre reform period Dev, (2001).

The growing significance of rural non-farm activities specially in the post reform period has been justified by studies undertaken by various sources.

Fisher *et al.* Cite the Economic Census of 1990 (Gol 1995) as recording 12.6 million rural non-farm enterprises employing 29.1 million people, calculated as 1.8 males and 0.5 females per enterprise. Fisher *et al.* (1997) emphasis that non-farm employment is particularly important to small and marginal farmers, as well as the landless, who cannot derive sufficient income in the agricultural sector, and also find the sector to be an important safe net to rural households in times of agricultural distress. They estimate marginal and landless households to spend between 20 and 50 per cent of their working days on non-farm activities.

Datt and Ravallion (1996) and Ravallion (2000), in a comprehensive study, concluded that the growth of real per capita non-agricultural output can have a significant impact in reducing rural poverty if growth of real per capita non agricultural output moves above its trend line.

Papola (1992) in examining NSS data finds that the number of workers who recorded Rural Non Farm employment as their principal employment grew at 5 per cent per annum between 1977-8 and 1987-8, while the share of non-farm jobs rose from 17.9 to 23.4 per cent on rural employment.

Hazell and Hagblade (1991) suggest that income from the Rural Non Farm Sector contributed between 25-35 percent of the total income of rural households.

Bhalla (1993) finds that 40 per cent of all new non-farm employment was created in rural areas whilst non-farm employment in the same period account for almost one third of all new job for male workers. Thus numbers of households engaged in Rural Non Farm employment are rising, as is the proportion of non-farm income per household.

Unni (1998) argues that the beginning of a structural change in employment away from agriculture towards the non-farm sector is evident, both at all-India and rural-India levels.

According to Lanjouw and Shariff (1999), in India not only is the non-farm sector an important source of income to the rural households, but different types of activities appear to be of different relevance to the poor. Such trends and patterns of diversification promote the modernisation of the structure of rural economics. (S.P. Premaratne and S.M.P. Senanayake, 2004)

K. Sain (1995) studied (i) the nature of changes in rural non-farm employment in the country as a whole, (ii) the extent of rural non-farm employment at the state and Union Territory levels and (iii) the categories relating to occupational shifts from agricultural to non-agricultural employment and some related issues. The results show that there has been a discernible shift in rural employment at micro level from farm to non-farm occupations.

The off-farm sector in our country has attracted attention in recent years as it has performed an increasingly significant rural income augmentation function as reflected by studies undertaken by C.S. Vaidya, C.S. Nandda, N. K. Sharma and T.R. Sharma, 1995. Rural non-farm employment has in recent times assumed importance in economic development. G. Gangadhara Rao, (1995) studied that the non-farm sector plays a positive role in the removal of poverty, generation of employment and decentralisation of urbanisation. It is a significant source of income to the small and landless farmers during the slack season.

Rural non-farm economy in India accounted for nearly one-fifth of total employment and exhibited an increasing trend as studied by Hazell and Haggblade (1991) Dev (1990), Murthy and Durga (1992), Shukla (1991) and others studied the quantitative significance of rural non-farm employment at different levels, viz., at all-India, state and district levels and examined its determinants.

Datt and Ravallion (1997) studied the poverty and impact of growth of non farm sector. Saxena (2001) studied the sustainable development of rural economy and non-farm employment opportunities In India. Saxena (2003) studied the potentiality of non farm sector in India on the determinants that would help in the development of non farm sector. According to him non farm sector in India has an immense potential which can help to reduce poverty. Gopalappa (2005) studied the pattern of rural non farm employment diversification at the household level in Karnataka and estimated the determinants of employment in the selected non farm rural activities.

Lanjouw and Sharift (2002) had attempted to assess the contribution of the non-farm sector across population quintiles defined in terms of per capita income of 1765 villages in India. Jha (2006) studied the importance of non farms sector as employment generator in the background of agricultural stagnation in the 1990s.

The determinants for the increase in non-farm activities in post reform periods are many. A number of Indian studies however suggest growth of agriculture is likely to stimulate growth and development of Rural Non Farm Economy (Hazell and Haggblade 1991, Bhalla 1993, Dev 1990, Papola 1992, Shukla 1999.1, 1992 Unni 1991, 1994.)

In the mid seventies Raj (1976) put forward the hypothesis that “conditions are favourable for the more extensive and rapid growth of non farm sector in only some regions of India, that is, those which have recorded moderate to high rates of growth of agricultural output without being subject to serious fluctuations”.

Fisher *et al.* ‘study concludes that, “growth in the Rural Non Farm sector is clearly boosted by a thriving agricultural economy” (1997: 206) citing the 1991 Census which records that in states with a healthy agricultural sector such as Punjab, Haryana and West Bengal, over 25 per cent of rural workers were engaged in the non-farm sector whilst in Bihar and Madhya Pradesh (with more sluggish agricultural growth) it was only 10 per cent. Sankaranarayan (1980) tried to test this hypothesis using per capita (rural) consumer expenditure and value of crop output per agricultural worker and concluded that the differences in agricultural prosperity by and large do not explain the variations in the share for rural non-agricultural workers.

In his micro study of 18 villages, Chadha (1994) conducted detailed employment and poverty household surveys across three states of differing levels of development: Bihar, considered a

backward region, Andhra Pradesh, an agriculturally developed region but with comparatively little non-agricultural activity, and UP, a state with both developed agricultural and non-agricultural sectors. He concludes that this linkage between the sectors cannot be taken for granted, highlighting his finding that as the economy develops, the proportion of non-farm incomes increases in poorer households.

Growth in non-farm activities was the result of push factors in the pre reform period which we call 'distress-induced' but post reform period saw an increase in this sector due to pull factors. Shylendra and Thomas (1995) found that growth in different Rural Non Farm activities are due to developmental pull factors, in post reform period. Based on a micro study of a semi-arid village in Gujarat, significant occupational diversification was found. 90 per cent of households were found to be engaged in non-farm activity. Growth in non-farm activities was largely attributed to pull factors, which particularly consisted of increased local demand for goods and services and expansion of government activities. Other positive factors included agricultural modernization and commercialization, increased demand for non-crop goods and services, urbanization and growth literacy and welfare-oriented policy interventions leading to increased job opportunities.

In spite of a great deal of research on non-farm sector in India, we are yet to identify the role of the complex matrix of demographic factors, institutions and the quality of governance, infrastructure, disease pattern, access to public goods, literacy, & geographical position of the farm sector in the transition from traditional agricultural activities to peripheral non farm' activities.

Objective and Methodology

The objective of this paper is to identify some of the factors affecting accessibility to non farm activities of our focus group namely marginal, landless and small holder farmers of the three districts of West Bengal.

The study was based on existing literature on the subject as well as on field studies. The case study is presented covering ten villages randomly selected from the industrially backward districts of West Midnapur, North 24 Parganas and south 24 parganas of West Bengal. 403 households were interviewed. 102 households were selected from North 24 Parganas, 105 households from South 24 parganas and 196 households from West Midnapur. Primary data was collected through questionnaires visiting 403 households. This study gathered data of two types –

- on the households perception of rural non farm activities and their eagerness to diversify from their primary activities of farming/cultivation and
- the factors which they felt either helped or hindered this process of diversification. The households were personally approached with the help of the panchayats and efforts were made to ensure that the sample households belonged to either one of our focus group.

The sample households were approached with structured questionnaires and the "Karta" of the family was interviewed. Interview with each of the sample households for lasted twenty to twenty five minutes. In the interview phase the opening question addressed the issue as to whether they had diversified from the primary activity which is farming and if yes listing down the diverse range of non-firm activities they were engaged in. Follow up questions addressed issues like land ownership, quality of soil, livestock, financial indebtedness, level of literacy, level of savings and demographic profiles which have been proved in many research studies to be some of the major factors/constants either affecting the adaptation of rural non-farm activities, or push-

ing them towards it. Data from the questionnaires were then tabulated and logical inferences drawn. The study period was from February 2007 to January 2008.

Results and Discussion

To study the aspect of diversification from primary to secondary activities we have first tried to look into the fact as to what percentage of the sample households have diversified into secondary or rural non farm activities. Out of the 403 households surveyed 249 admitted that they are engaged in secondary activities which represented 61.79 per cent apart from farming, with only 154 household still engaged only in primary activities representing 38.21 per cent. The prevalence of secondary activities was much more in West Midnapur where, out of 196 households surveyed, 144 i.e. 73.47 per cent were engaged in secondary activities, followed by North 24 Parganas where out of 102 households surveyed, 53 i.e. 51.96 per cent were engaged in secondary activities and lastly South 24 Parganas where out of 105 households surveyed 53 ie 50.48 per cent were engaged in such activities.

The type of secondary activities that the households where engaged in have been found to be mostly informal requiring less investment, training and education and mostly seasonal in nature barring a few households in the districts of West Midnapur where they have adopted teaching in primary schools as their secondary activity and a few in North 24 Parganas and South 24 Parganas who were found to be engaged in repairing business, manufacturing business, working as alopahy doctor, wood carpentry, and tutions which required undergoing of some kind of training and education. The exhibit below shows us an exhaustive list of the various types of secondary activities engaged in by our sample households in the three districts of West Bengal.

Exhibit: Secondary Activities engaged in by the sample households (District wise) Secondary Activities

South 24 Parganas : (a) Book and Stationary shop (b) Tea Stall, (c) Helper in garages, (d) Mike selling/hiring (e) Fruits/Vegetable vendor, (f) Repairing shop dealing with clock repairing, (g) Cutting of soil, (h) Wood Polish, (i) Selling channa to school children, (j) Labourer in battery Company, (k) Rice business, (l) Helper in Hoseiry factory, (m) Helper in pandal making, (n) Carpenter, (o) Helper in Ready made garments, (p) Oil Business, (q) Working as “Raj Mistry”, (r) Fish Trading, (s) Business of Milk selling, (t) Van driver, (u) Alopahy Doctor, (v) Driver of school vans, (w) Offering tutions to school children in villages, (x) Rickshaw puller, (y) Working as security guard,

North 24 Parganas : Bakery shops, selling and cutting of trees, “raj mistry”, selling water from pumpsets owned, stationary shop, fruit & vegetable vendor, trading in livestock, carpenter, selling eggs, van driver, manufacturing bags, fishery, embroidery work in sarees, giving vans on hire, poultry business, trading in coconuts, Milk selling, business in mangoes, wholesale business in rice dealer of Kabiraji medicine, trading with thrown away bottles & containers, teastalls, working as /immam (priest), letting land tractors on hire, manufacturing T-Shirts, business in under garments, making cane baskets, letting out pumping machines on hire.

West-Midnapur : Raj Mistry, helper in pickle industry, helper in building of roads, engaged in miscellaneous work like building floor, roofs etc, peddler selling cloth and iron, fruit & vegetables vendor, rickshaw puller, business in stationary goods, business in clothes, carpenter, working as a priest, building of house sheds, vandriver, potter, seller of beetal leaf, offering tutions,

primary school teacher, kitchen gardening, repairing shops repairing torches and other small articles, saloon.

The fact that the farming community is becoming more and more engaged with non-firm activities clearly evolved from the primary discussions with the sample households which painted a very grave picture that farmers are finding it difficult to sustain their livelihoods by engaging themselves only in farming activities. The next phase of discussions with the sample households brought forward certain crucial factors, which they felt pulled them to non farm activities or prevented them from non-farm activities. These factors and their impact on non-farm activities have been discussed below.

Land Ownership

Land ownership emerged as one of the crucial variables resulting in farmers positive or negative experiences in respect to adaptation of non farm activities. Out of 403 sample households, 140 was found to belong to the category of landless farmers or agricultural labourer’s representing 34.74 per cent, 250 was found to belong to the category of marginal farmers owning less than 2.5 acres of land, representing 62.03 per cent and 13 belonged to the category of small holder farmers owning 2.5 to 5 acre of land representing only 3.23 percent of the total household’s surveyed. Prevalence of marginal farmers was seen to be the highest in West Midnapur, followed by North 24 parganas and South 24 Parganas. Land less farmers were also found to be highest in West Midnapur followed by South 24 Parganas and North 24 Parganas. Small holder farmers were seen maximum in North 24 Parganas followed by south 24 parganas and West Midnapur.

With respect to the existence of secondary activities amongst the three category of farmers we observe that percentage of landless farmers adopting secondary activities was the highest, representing 63.57 per cent, followed by marginal farmers with a percentage of 61.60. The practice of secondary activities was observed to be the lowest amongst small holder farmers representing 53.85 per cent as shown below in Table 1.

**TABLE 1: Existence of Secondary Activities amongst HH’s surveyed
On the basis of Asset ownership**

Asset Ownership	Secondary Activities		Only Primary Activities	
	No	%	No	%
Marginal Farmers (250)	154	61.60	96	38.40
Small Holder Farmer (13)	7	53.85	6	46.15
Landless Farmer / Agricultural Laborers (140)	89	63.57	51	36.43

The households felt that fragmentation of land as well as declining productivity of the land was resulting in more and more farmers choosing secondary activities to mitigate the loss Declining productivity according to them was due to factors like increased salinity of the land, erosion of the top soil due to rampant multiple cropping system, improper use of low graded fertilizers and pesticides.

Level of Literacy

The level of literacy has a positive co-relation with the adaptation of rural non-farm activities by rural house holds. The house holds felt that an illiterate person has the major drawback of understanding the market demand, the type of activity to be engaged which will gives them a good return, the level of investment required to name a few, so they felt contended with carrying on the activity that they are accustomed to i. e. farming. So illiteracy was regarded a major constraint towards adoption of non-farm activities.

In order to justify the views expressed by the rural households, we first identified the level of literacy amongst the house holds surveyed as shown below in Table 2 and then amongst the 3 districts as in Table 3.

TABLE 2: Level of Literacy amongst HH'S surveyed

Literacy Level	HH's Surveyed	
	No	%
Illiterate	85	21.09
Primary (Upto 6 Class)	102	25.31
Secondary (Class 6 to Class 10)	142	35.24
Higher Secondary (Class-II to Class 12)	48	11.91
Graduation	24	5.95
Post Graduation	2	.5
Total	403	100

TABLE 3: Literacy Level in the Surveyed Districts

District	Illiterate		Primary (upto 5 Class)		Secondary (Class 6 to Class 10)		Higher Secondary (Class-11 to Class 12)		Graduate		Post Graduate	
	No	%	No	%	No	%	No	%	No	%	No	%
South 24 Paraganas	20	19.05	41	39.05	37	35.24	4	3.81	3	2.85	Nil	-
North 24 Paraganas	37	36.30	35	34.30	25	24.50	4	3.92	1	0.98	Nil	-
West Midnapur	28	14.29	25	12.76	80	40.82	41	20.91	20	10.2	2	1

The level of literacy seems to be the highest in West Midnapore followed by South 24 parganas. Literary level was poor in North 24 Parganas since the percentage of illiterates in North 24 Parganas seems to be the highest i.e. 36.30 per cent as shown in the table above.

Next we identified the level of literacy amongst all the three focus group i.e. marginal, small holder and landless farmers. The results have been shown in the Table no 4 below.

TABLE 4: Level of literacy amongst different segments of Land ownership

Land ownership	Illiterate		Primary (upto 5 Class)		Secondary (Class 6 to Class 10)		Higher Secondary (Class-11 to Class 12)		Graduate		Post Graduate	
	No	%	No	%	No	%	No	%	No	%	No	%
Marginal farmer	47	18.80	57	22.80	91	36.40	37	14.80	16	6.40	2	0.80
Share holder Farmer	1	7.69	4	30.77	4	30.77	3	23.08	1	7.69	Nil	--
Landless Farmer	39	27.86	41	29.29	45	32.14	9	6.43	6	4.29	Nil	--

Here we observe that level of literacy was the highest amongst small holder farmers, followed by marginal farmers where we observe that two of the house holds interviewed expressed that they had completed their post graduation degree which was indeed a very positive sign towards adaptation of non-farm activities and not confining themselves to just primary activities. Landless farmers were the most affected group where illiteracy rate was as high as 27.86 per cent. Their trend towards higher levels of education was observed to be the lowest.

The relation between level of literacy and adaptation of non farm activities was found to be positive which is presented in the Table no 5 below based on the data received from the house holds interviewed.

**TABLE 5: Existence of secondary occupation amongst HH'S surveyed
On the basis of literacy**

Level of Literacy	Secondary Occupation		Only Primary Occupation	
	No	%	No	%
Illiterate (85)	41	48.24	44	51.76
Primary (102) (Upto Class5)	57	55.88	45	44.12
Secondary (142) (Class 6-10)	93	65.49	49	34.51
Higher Secondary 48 (Classes 11-12)	39	81.25	9	18.75
Graduation (24)	23	95.83	1	4.17
Post Graduation (2)	2	100	Nil	Nil

We observed that as the level of literacy increased the tendency of house holds relying only on farming activity declined and divergence to secondary/non-farm activities increased. The reverse was also true.

Existence of Livestock

Existence of livestock was also considered to be a variable indirectly creating an impact on a house holds decision to diversify into non farm activities. Livestock is considered to be an asset as far as rural house holds are considered for two reasons , one, livestock can provide a house

hold with necessary capital which it might need is times of emergency or for investing in either rural non farm activities, second, it provides an opportunity to house holds to engage themselves in non farm activities associated with livestock like poultry business, selling eggs, supplying milk to dairies and so on which was prevalent amongst the house holds surveyed.

Amongst the house holds surveyed (403) we found that 61.54 per cent of house holds had livestock. The existence of livestock was felt to be very important in West Midnapur with 71.94 per cent of the house holds in the district having livestock followed by North 24 Parganas with 51.96 per cent and south 24 parganas with 50.48 per cent. Existence of livestock was also very high amongst marginal farmers where 68.80 per cent of the total marginal farmers (250) interviewed had livestock followed by small holder farmers with 61.54 per cent of the total small holder farmers interviewed (13) and last landless farmers with 49.29 per cent of the total landless farmers interviewed i.e. (140) had livestock

A positive co-relation was felt between existence of secondary occupation and existence of livestock amongst the house holds surveyed which has been placed below in Table 6.

TABLE 6: Existence of Secondary occupation amongst HH's surveyed on the basis of Livestock owned by them

HH's Surveyed	Secondary Occupation		Only Primary Occupation	
	No	%	No	%
With Livestock (248)	154	62.10	94	37.90
Without Livestock (155)	96	61.94	59	38.06

It was observed that house holds with livestock was more prone towards adaptation of secondary activities as compared to house holds without any livestock which justified that livestock did have an impact on the adaptation/non adaptation of non farm activities besides farming.

Level of Savings

Level of saving was regarded to be a crucial constraint towards adaptation of non-farm activities. The house holds with meager savings or no savings felt that even if they wanted to adopt non-farm activities they were unable to do so since minimum amount of capital was needed to be invested in any form of activity that would be adopted, which they could not afford.

To justify the relationship between non farm activities and level of savings we first calculated the level of savings by the simple formula (Income-Expenditure) where we asked the house holds to give us their monthly income and expenditure which was then converted on a per annum basis. It was observed that the level of saving was the highest is the district of West Midnapur (85.2 per cent) where the house holds surveyed felt that due to factors like higher level of literacy, higher level livestock and low level of financial burden like loans, the level of savings could be higher than house holds in the districts of south 24 parganas where the level of saving was confined to 15.24 per cent of the 105 house holds surveyed, followed by north 24 parganas where the level of saving was confined to 14.71 per cent of the 102 house holds surveyed.

The level of saving was also observed amongst our three four groups which is given in Table 7 below.

Table 7: Level of Savings of HH'S surveyed on the basis of land ownership

<i>Land Ownership</i>	Savings		No Savings	
	No	%	No	%
Marginal Farmer	150	60	100	40
Small holder Farmer	4	30.77	9	69.23
	72	51.73	68	48.27

The tendency of saving was observed to be the highest amongst marginal farmers representing 60 per cent of the total number of marginal farmer surveyed (250), followed by landless farmers representing 51.73 per cent of the total 140 landless farmers. Tendency of saving was found to be the least amongst small holds farmers with only 30.77 per cent of the total 13 small holder farmers surveyed. It should also be noted here that level of secondary activities was also found to be the highest amongst landless farmers and marginal farmers as compared to smallholder farmers as shown earlier (Table 1). With respect to this we have also tried to tabulate the range of savings of the surveyed house holds as show below in Table 8.

TABLE 8 : Range of savings of the surveyed households

Range of Saving (per with)	No	%
NIL (0)		
0-500	31 9	79.16
500-1000	41	10.17
1000-1500	12	2.98
1500-2000	18	4.47
2000-2500	2	0.49
2500-3000	4	.99
3000-3500	0	
3500-4000	2	.5
4000-4500	0	
4500-500	2	.5
5000-5500	0	
5500-6000	1	.25
6000-6500	0	
6500-7000	4	0.5.5
TOTAL	40 3	100

The level of saving does have a bearing on the adaptation of non-farm activities has been clearly justified in the table 9 below.

TABLE 9 : Existence of secondary occupation amongst HH's surveyed on the basis of savings of HH'S

HH's Surveyed	Secondary Occupation		Only Primary Occupation	
	No	%	No	%
With Savings (200)	146	73	54	27
Without Savings (203)	104	51.23	99	48.77

Where 73 per cent of the house holds out of 200 house holds with savings have gone for non farm activities where as only 51.23 per cent of house holds out of 203 “house holds without savings” have gone for non-farm activities only.

Financial indebtedness

Discussions with the house holds on this issue brought out the plight of the house holds who were under the burden of debt. Such house holds felt that financial indebtedness was a crucial constraint towards accessibility to non farm activities Out of 403 house holds surveyed 56 (13.90 per cent) of the house holds were under financial indebtedness as compared to 86.10 per cent who were without any financial burden.

Most part of the financial assistance was taken from financial institutions like banks. Other sources were money lenders neighbors or friends and cold storage owner. The picture has been provided below in Tables 9 and 10.

TABLE 9: Sources of Financial Assistance taken by HH'S surveyed

	No	%
Financial Institute	43.00	76.79
Money Lenders	7.00	12.50
Neighbors / friends	5.00	8.93
Cold Storage owner	1.00	1.78
TOTAL	56.00	100.00

TABLE 10: Burden of loan taken by HH'S surveyed from different sources

	Cleared		Not Cleared	
	No	%	No	%
Financial Institutions (43)	15	34.88	28	65.12
Money Vochers (7)	1	14.29	6	85.71
Cod storage owner (1)	-	-	1	100
Neighbour/friend (5)	3	60	2	40

In respect of the 56 house holds who were under financial burden, 12 house holds ie 21.45 per cent obtained fund through personal relationship without having to provide any sort of collateral security The remaining had to provide collateral security to obtain funds basically in the form of mortgages of land property, agricultural produce and ponds. The data obtained in this regard, is presented below in Table 11.

TABLE 11: Collateral security financial assistance taken by HH’S surveyed

	No	%
Mortgage of land	31	55.36
Mortgage of house property	11	19.63
Mortgage of agricultural produce	1	1.78
Mortgage of pond	1	1.78
Personal relationship (No collateral)	12	21.45
Total	56	100

The reasons for financial assistance amongst the surveyed house holds have been presented below in Table 12.

TABLE 12: Reasons for taking financial assistance amongst HH’S surveyed

	No	%
For pursuing secondary Activity	22	39.3
For Primary Activity	26	46.42
Other Reasons	8	14.28
TOTAL	56	100

It is interesting to note that percentage of the house holds who had taken loan for primary activities was higher as compared to ones with secondary activities. Besides it has been observed that possibility of taking financial assistance amongst house holds undertaking non farm activities was much less as compared to house holds engaged only in primary activities which justifies that adoption of non farm activities apart from primary activities has helped house holds to increase their income. Besides it has also helped in clearing their debt which they had taken from the above mentioned sources.

TABLE 13: Loan taken by HH’S surveyed Undertaking Secondary Occupation

HH’S surveyed	Loan taken		No Loan taken	
	No	%	No	%
With Secondary Occupation (250)	32	12.80	218	87.20
With Primary Occupation (153)	24	15.68	129	84.31

An inter district comparison showed that level of financial burden was minimum in West Midnapore and the highest in North 24 percentage. Factors like higher level of education and higher level of livestock has resulted in less percentage of house holds going for loans in West Midnapore, resulting is higher level of savings as shown in Table 14.

Table 14 : Loan taken by the surveyed HH'S in various districts

Districts	HH's with loan		HH's without loan	
	No	%	No	%
South 24 Par (105)	14	13.33	91	86.67
North 24 (102)	31	30.39	71	69.61
West Midnapore (196)	11	5.61	185	94.39

Amongst our focus group the tendency of taking loan was seen to be the highest amongst small holder farmers with low level of non farm activities as compared to landless and marginal farmers with higher levels of secondary activities as shown in Table 15.

Table 15 : Loan taken by the HH'S surveyed on the basis of asset ownership

	No	%	No	%
Marginal Farmer (250)	30	12	220	88
Small Holder Farmers (13)	3	23.08	10	76.92
Landless farmers (Agricultural Labourers) (140)	23	16.43	117	83.57

The factor of Age

Age of the 'Karta' or head of the family was regarded as another crucial factor on which the question as to whether the house hold would diversify and adopt non-farm activities along with their primary activities actually rested.

The age of the head of the house holds interviewed was tabulated and is presented below in Table 16.

TABLE 16 : Percentage distribution of the head of the HH'S interviewed by age (above 20 years)

Age Group	No	%
20-29	96	23.82
30-39	124	30.77
40-49	108	26.8
50-59	56	13.9
60-69	14	3.47
70+	5	1.24
TOTAL	403	100

We tried to find out whether there existed any kind of relationship between the age and adaptation of secondary or non farm activities as shown in Table 17.

TABLE 17: Percentage distribution of the head of the HH'S interviewed by age and secondary occupation

Age Group	No	Secondary Occupation		Primary Occupation	
20-29	96	68	70.83	28	29.17
30-39	124	75	60.48	49	39.52
40-49	108	69	63.89	39	36.11
50-59	56	31	55.36	25	44.64
60-69	14	8	57.14	6	42.86
70+	5	2	40	3	60
TOTAL	403				

From the data tabulated below we observe that people within the age group of 20-29, 30-39 and 40-49 were more prone towards non-farm activities. With increase in the age, the tendency to adopt non-farm activities lessened due to reasons like health, capacity to take risks, increased hours of work to name a few. They were observed to be more contented with their traditional activity that they were carrying on for few generations. It was also observed, while interviewing the other member of the house holds, that they are more open to the idea of non-farm activities as compared to farm activities. Out of 403 house holds interviewed 154 i.e. 38.21 per cent of the house holds had others earning 'member' besides the Karta and it was observed that 50:65 per cent of such house holds had adopted non-farm activities as compared to primary occupation i.e. farming.

Conclusion

The study shows, that the shift of the farmers from farm activities to non farm activities is not a myth it a reality. Growth in non-farm activities was the of not only push or distress induced factors like fragmentation of land, financial indebtedness crop cultivation becoming an increasingly investment-intensive activity demanding mechanization, more investment is better quality manures, and seeds, pesticides, which is difficult to afford specially with agricultural crops seeing only modest prices but also due to more positive or pull induced factors like growth of literacy, job opportunities and increased demand for non-crop food and services. Thus non farm activities is becoming more important amongst marginal and landless farmers which can be observed from the variety of non-farm activities that our surveyed house holds were engaged in who is finding it difficult to derive sufficient income from the agricultural sector.

The conclusions of the present study are offered with some caveats. Although some factors affecting non-farm activities have been identified yet the list of factors cannot be claimed to be exhaustive. Future research in this direction can be undertaken covering many more villages and districts to identify the role of the complex matrix of demographic factors, institutions, quality of

governance, infrastructure access to public goods & geographical position of the farm sector in the transition from traditional agricultural activities to peripheral non farm activities.

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A Study of Hospitality Industry's Gap Perception on Education and Training Provided in HMCT Institutes

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Abstract: *Significant changes in the hospitality industry stress the need for human resources management. The outcome of this study act as a guide for the industry to know the kind of manpower they are getting and also to plan for training programme for such entry level professionals. It also gives feedback to the educators.*

The objective of the study was to find key skills demanded by the industry in the Indian context, and how the education system needs to respond to these. The null hypotheses stated that there is no significant difference between the existing and expected skill sets among entry-level hospitality graduates.

A descriptive research design has been used to conduct the study. 30 five star, four star and boutique properties have been surveyed. The heads of all the core departments in the hotel i.e. HR, F&B, front office, food production and housekeeping heads were given a questionnaire. A five point rating scale was made to record their responses about the existing and expected qualities possessed by graduates. Chi square technique was used with SPSS software package was used to analyze the data.

Findings revealed significant differences in the existing skill set and the desired skills. The mushrooming of HM colleges across the country has focused on the fact that there is dilution in quality of education and checks must be put. Secondly the industry that faces high attrition rates must focus on training to retain and develop entry-level professionals.

Keywords: Hotel, hospitality education, hospitality industry, skill, entry-level graduates

Introduction

Identifying the needed qualities in an HM graduate is prerequisite for the industry as well as the academic institution. For the former it helps in hiring the right candidate and for the later it knows whether the training provided by them is meeting the objective of providing the right manpower to the industry. Specifically, industry has strived to identify valid job competencies and skill sets required for future leaders (Tesone & Ricci, 2005) in an effort to reduce turnover as well as combat challenges in the recruitment and retention of quality managers (Ghiselli, La Lopa & Bai, 2001).

Hospitality leaders have long demanded that students graduating from industry specific higher education programs possess appropriate management skills and competencies required to remain competitive. These underscore the critical role of the educational experience and the importance of curriculum development in shaping the industry's future leaders (Tsai, Chen & Hu, 2004; Dopson & Tas, 2004).

In the U.S there has been a tremendous growth in the number of hospitality programs over the past 25 years. There has also been a palpable shift from the traditional home economics based program to a business-related focus

As K. V.Simon points out, in India to “*What began as a humble service by a group of dedicated women in Andheri army barracks in 1954 has grown to an organized activity across the coun-*

try today, educating, training and developing human resources for the hospitality industry today.”

The new millennium has brought in immense opportunities for the hospitality professionals. Seizing these opportunities and developing the workforce with employable skills and competencies is the challenge of educators and entrepreneurs.

The current status of hospitality education in India leaves a lot to be desired in terms of training manpower in these competencies. The hospitality education curriculum offered in public hospitality schools and in most institutions operating in the private sector focuses on operations training. Jauhari (2006) cites the FHRAI think tank report (2001) which observes that, “... only half the total of 180 institutions/colleges in India provide a worthwhile education which is of use to students and to those hiring students for work in hotels and restaurants.”

A recent brainstorming session between the industry and the academia at Grand Hyatt, Mumbai (2009) raised the issue of availability of trained candidates for filling various positions in the industry. The Industry pointed out the dire need for reforms in education sector in India.

According to Pavesic (1991), hospitality education has attempted to make significant curricular changes in order to meet the industry’s perceived evolving needs. And, given the shifting nature of all micro and macro-environmental events that have occurred during the past 25-years in the U.S. (e.g. social cultural changes, technological advances, growing concern over sustainability and green practices, globalism), it appears likely that the competencies desired by hospitality professionals have also evolved.

Since the 1920s, hospitality educators have looked upon industry leaders for guidance regarding the essential competencies that graduates need for professional success (Kay & Russette, 2000). Despite the emphasis on leading rather than following (Lewis, 1993), by design, hospitality education may not be able to adapt as rapidly to change as the industry it serves (Miranda, 1999). Nevertheless, the goal of hospitality education is to provide industry with graduates that are capable of conducting the affairs of business and maintaining a readiness to approach future management issues without reservation (Enz, Renaghan & Geller, 1993). Knowledge creation in essence has become the most significant objective of educational programs that are oriented to whet the skills of students in meeting the needs of the industry (Tesone & Ricci, 2005; Chathoth & Sharma, 2007).

However, as the sheer number of hospitality degree programs increased so did the criticism that higher education programs were in fact becoming out of touch with the direct needs of the industry (Chung, 2000). Tension has been detected in the hospitality literature between hospitality educators and industry professionals regarding the extent to which higher education is responsible for competency and skill development (Harper, Brown & Irvine, 2005; Williams 2005). Arguably industry is “buying a product,” and it is essential that today’s curricular and educational experiences prepare students for leadership (Raybould & Wikins, 2006).

Objectives

The present study was planned with the following aims

- To examine the qualities in terms of the skill sets that the hotel industry was looking for among entry level graduates coming out of hospitality institutes in India.
- To find the gap between existing and expected skill sets as possessed by the entry level hospitality graduates entering the industry.

Hypotheses

H0 : there is no significant difference between the existing and expected qualities possessed by the entry level hospitality graduates.

H1: There is a significant difference between the existing and expected qualities possessed by the entry-level hospitality graduates.

Methodology

Thirty hotels which included five star, four star and boutique properties were contacted. A list of qualities thought essential was made in consultation with 10 principals/heads of hospitality education institutes. These were put on a five point scale.

The Managers of five core departments of the hotel i.e., Training/HR, front office, food and beverage, food production and housekeeping were asked to judge the graduates for their existing as well as expected level of the qualities they saw in a hospitality graduates. Training and Hr functions although different were handled in many cases by the one person only in many properties and therefore they have been put under on only. Secondly as soon as the graduates are recruited they are under the guidance of the training manager and therefore he was thought to be the best person in many cases who understood the entry-level graduate.

SPSS package was used to analyze the data. Frequency and percentages were used to present it along with variance. Chi-square was used to find the difference between the existing and expected set of skills among hospitality graduates.

Discussions were also conducted wherever there was an opportunity to interact with other levels of management staff, particularly the supervisory levels. This helped in gathering qualitative data for the research and also drawing logical conclusions from the findings.

Review of Literature

Buergermeister (1983) revealed in his study competencies common to all hospitality entry-level management positions during this timeframe. Specifically, customer satisfaction principles, effective leadership skills, such as motivation and communication, as well as training ability and profit realization were thought as essential for any beginning hospitality manager. Little importance by industry was given to computer (hardware and software) skills, as well as the ability to identify and select proper marketing media. Conducting labor studies and understanding management's role in collective bargaining were considered competencies also of little importance to the future success of hospitality management in the 1980s. In another study, he further identified competencies needed for hotel segment. Promotion of the safety and security of guests' was the single identified competency seen as essential for beginning managers in that sector, while the foodservice segment identified, 'possessing skills to effectively supervise personnel in food production and serving area' as their single most critical competency demanded of future managers.

In a study to determine the competencies needed to succeed in food and beverage operations, hospitality educators, students and industry representatives were surveyed (Okeiyi, Finley & Postel, 1994). , there were ten that all three groups considered important or very important; they included:

1. Human Relations
2. Leadership skills and supervision
3. Oral and written communication
4. Customer relations

5. Professional conduct/ethics
6. Time management
7. Energy management
8. Conflict management
9. Recruitment
10. Training

Specific to the hotel segment of the industry, two key studies have been published in the hospitality literature since Buergermeister's 1983 landmark competency study outlining the skill sets demanded by industry. Tas (1988) produced the first comparison study revealing eight essential competencies for management trainees. More than ten years later Nelson and Dopson (2001) uncovered the top relevant skills and abilities the industry deemed as extremely important for future leaders during this time frame, ten competencies were found within this category.

Tas (1988), uncovered the following as essential:

1. Manages guest problems with understanding and sensitivity
2. Maintains professional and ethical standards in the work environment
3. Communicates effectively both written and orally
4. Demonstrates professional appearance and poise
5. Develops positive customer relations
6. Strives to achieve positive working relationships with employees
7. Possesses needed leadership qualities to achieve organizational objectives
8. Motivates employees to achieve desired performance

Miranda.P (1999) examined the hospitality recruiter's perception of hospitality education training in relation to industry-site based training programs. It was found that five of the most important skills needed by college graduates as ranked by hospitality recruiters are: employee relations, leadership, guest services, staffing, and conflict management. The scores for each of the items was as follows: employee relations (73%), leadership (72%), guest services (67%), staffing (65%), and conflict management (61%). Also the study found that industry should play an instrumental role in developing contemporary and applicable curriculum

Further, the basic competencies of research chefs have also been examined (Birdir & Pearson, 2000). For the research-focused chefs the following competencies in order of importance were identified:

1. Knowledge of recipe development and formula ratios
2. Ability to work with a product development team
3. Knowledge of culinary fundamentals and production systems

The management focused chefs the following competencies were identified:

1. Ability to work with customer/client groups
2. Knowledge of end user skills (e.g. cooks in national chains)
3. Skilled at food presentation

but some items were considered less important. These included the following:

- Knowledge of finance systems
- Skilled at/with computer presentation programs (PowerPoint, CorelDraw)
- Ability to develop "packaging" for finished products

While Nelson and Dopson (2001) revealed the following in comparison:

1. Identify and solve managerial problems
2. Demonstrate leadership abilities
3. Control costs effectively
4. Develop positive customer relationships

5. Adapt the organization to meet customer needs
6. Train and coach employees
7. Manage crisis situations
8. Solve customer problems
9. Develop positive employee relations
10. Demonstrate effective oral communication skills

In a study focused on future club management competencies, researchers divided the knowledge, skills, and performance abilities that comprise them into nine domains or areas (Perdue, Woods & Ninemeier, 2001). 1. Budgeting 2. Ability to read financial statements, 3 Effective communications

G. Beth et al (2003) compiled a list of 99 competencies or skills (grouped into eight overarching factors comprising 28 dimensions) that might contribute to leadership success in the hospital-ity industry. Those competencies were rated on a five-point scale, in a survey of 137 industry leaders. The competency labeled “self management” was the top dimension (of the 28)-composed of ethics and integrity, time management, flexibility and adaptability, and self-development. Second in importance was competency in strategic positioning, comprising aware-ness of customer needs, and commitment to quality, managing stakeholders, and concern for the community. (However, concern for the community was rated least important compared to the other three dimensions in that category). Industry knowledge, leadership, and interpersonal skill were factors that, while important, were ranked lower by the respondents.

Raybould, M and Hugh, WT (2006) compared hospitality managers' expectations of graduate skills with student perceptions of the skills that hospitality managers valued. In contrast to previ-ous research on this topic, this study adopted a generic skills framework and managers rated skills associated with interpersonal, problem-solving, and self-management skill domains as most important. Although students tended to rate conceptual and analytical skills more highly than did managers, overall their perceptions of the skills that hospitality managers valued when recruiting graduates were realistic.

Manaktola(2007) elaborates on this analysis and notes that competencies required in the hospi-tality industry at the supervisory and management level in India differ from those provided in India's educational institutions. In general, the training provided is sufficient to meet the needs of entry-level positions in the industry but it is not geared towards developing students for supervi-sory and managerial work.

Ipe Mary (2008) cites the experiences of various hotel chains in India and concludes that the traveler in the future will be tech-savvy and discerning. Soft skills appear to be the base for cus-tomer service - from recruiting the right 'fit' for the brand and property to providing service in hotels. The challenge for the industry is to combine hospitality training, which embodies high-tech inputs with a 'high-touch' culture.

Tom Baum and Frances Devine (2009), identified the following -Communication skill, cus-tomer care and interpersonal skills, as most important skills needed for front office personnel.

Findings and Discussion

Various heads of departments of the hotels were asked about the skill sets possessed by the graduates. The departments covered were training/HR, food and beverage, front office, food pro-duction and housekeeping.

Table 1 Educational qualification and years of service of managers in the industry

S r. no	Manager	Educational qualification	Years of service			
			Min	max	variance	
1	Training/HR	Diploma in HM with a diploma in HR	14.03	7	18	5.82
2	Food and beverage	Diploma in hotel management	13.40	9	18	4.04
3	Front office	Diploma in hotel management	13.40	11	17	3.00
4	Food production	Diploma in hotel management	14.73	8	20	7.51
5	Executive housekeeper	Diploma in hotel management	15.50	7	23	13.63

It is seen from the above table that all the managers possessed a diploma degree in hotel management. The training/HR manager however had a diploma in HR also. The executive housekeeper was seen having the maximum work experience. This was typically seen in five star properties that had extremely trained manpower. This was followed by the food production staff.

Core qualities of the entry-level staff for all departments remain the same. Therefore all the managers of the hotels were asked regarding the communication skills, teamwork, attitude, leadership qualities, grooming standards, knowledge regarding safety and first aid, and professional and ethical standards.

Chi square test was conducted in order to find out if there was any significant difference in the existing and expected qualities found among the entry-level graduates.

Ho: there is no significant difference between the existing and expected qualities possessed by the entry-level graduates in the hotels.

H1: there is a significant difference between the existing and expected qualities possessed by entry-level graduates.

Table 2 Difference in qualities existing and expected among hospitality gradates

Qualities Manager	Com- munication	Team work	Attitude	Grooming	Leader ship qualities	Know ledge Of safety and First aid	Professional and ethical standards
Chi square values (at 5% level of significance)							
1. Trai ning	16.133	25.40	13.33	54.80	49.20	32.133	12.80
2. Foo d and Beverage	29.40	.533*	30.20	16.133	38.40	11.40	14.60
3. Fro nt office	11.40	16.20	28.133	7.80	25.20	13.99	26.00
4. Foo d production	39.60	36.03	21.80	22.00	29.20	11.40	12.60*
5. Hou se keeping	2.13*	18.20	4.80	26.13*	8.53	14.6	12.60

- Null hypotheses is accepted

It was found that null hypotheses was rejected by all the departments except the housekeeping dept, which seemed to be stating that there was no significant difference between the existing and expected levels of communication skills. This could be attributed to the fact that housekeeping being a back office job is mostly the choice of students who are weak in communication skills. Therefore the executive housekeeper is not expecting them to be fluent in English communication. She/he has been found to be ready to tech this in the process.

Working in team is an essential trait required by the people in this industry. The null hypotheses was rejected in all cases, i.e. most found that the entry level graduates were not working in teams, however in F&B dept then null hypotheses was accepted. All students of HM who are in-

terested in F&B are exposed to banqueting and service to large gatherings. They are already aware that it will be difficult to survive if they do not learn to do team work. This could be the reason for this dept not showing any significant difference between the existing and expected quality of team work

All departments rejected the null hypotheses on the quality of attitude towards work. The students did have attitude problem. They did not show willingness to learn and were not ready to do hard work .A tremendous need was felt to inculcate right attitude among students early in life.

Except housekeeping dept all depts. Reject the null hypotheses on the qualities of grooming. The entry level graduates were poorly groomed s reported by all departments. Housekeeping however reported them to be well groomed. This could be attributed to the fact that being low on the communication front, they made up for it by good grooming.

All departments reported a gap in expectation of leadership skills among entry level graduates. The null hypotheses were rejected by all. There was a need felt to develop leadership training among entry level graduates. They lacked confidence.

All depts. Reject null hypotheses when it came to knowledge of safety and first aid. That is the students needed to learn about safety and first aid. This could be attributed to the fact that in the past there was a module on safety in the syllabus of HM programmed. This has however been scrapped in the coming years and so the gap.

Professional and ethical standards were also lacking among entry-level graduates. These qualities need to be built among the youngsters and the industry feels it is the institute that can go a long way in doing so

Table 3 Difference in skill sets as perceived by the executive housekeeper

Sl no	Skill sets in housekeeping	Chi square values
1	Use of cleaning agents	000*
2	Knowledge of rooms	12.20
3	Knowledge of HK equipment	30.20
4	Use of technology in rooms	12.20
5	Eye for detail	21.8

The null hypotheses has been accepted only in one case I .e, the entry-level graduates had knowledge of cleaning agents. This could be attributed to the fact that during their industrial training they exposed to manual jobs in housekeeping, so knowledge of cleaning agents comes to them during that time. Repetitiveness of the job gives them the necessary understanding of the cleaning agents.

Table 4 Difference in existing and expected skill sets as perceived by the executive chef

Sl no	Skill sets in food production	Chi square values
1	Knowledge of sauces	14.60
2	Knowledge of cuts	23.30
3	Use of kitchen equipment	9.80
4	Knowledge of food storage	12.60
5	Knowledge of safety and first aid	11.40

The null hypothesis was rejected on all counts here. A significant difference was found in the existing and expected skill sets of students. The industry found the students lacking in the basic skills needed to do the job of food production in the industry

Table 5 Difference in skills as perceived by the front office manager

Sl no	Skill sets in front office	Chi square values
1	Use of front office equipment	000*
2	Marketing skills	13.20*

3	Accounting skills	7.4
4	Punctuality	16.13
5.	Knowledge of foreign language	7.4

The null hypotheses were accepted in two skills sets. The industry did not expect entry-level graduates to be well trained in the use of front office equipment, nor possessing the required marketing skills. They expected the candidate to learn them once they are on the job. In fact they were ready to train them once they joined and therefore they did not report any lack of training.

However graduates were expected to have a basic knowledge of accounting, be punctual and also knowledge of foreign language was desirable.

Table 6 Difference in skills as perceived by the food and beverage manager

Sl. no	Skill sets in food and beverage	Chi square values
1	Knowledge of service	4.20*
2	Punctuality	25.40
3	Knowledge of alcohols and beverages	326.60
4.	Concern for quality	25.80
5	Respect for rules and regulations	14.60

The null hypotheses was accepted only in one case i.e., knowledge of service. The graduates seem to be aware of the various kinds of service and the industry also knew that they would develop the skill hands on and so did not expect too much out of the students.

However the alternate hypotheses i.e., there was a significant difference in students' knowledge of beverages, and their commitment to the industry in terms of their punctuality, their concern for quality and their respect for rules and regulations.

Conclusion

This study was conducted to see the existing and expected skills among the entry level graduates of hospitality management. The findings revealed that there existed a gap in all areas of desired skills needed by various departments. The highlights of the findings are

1. The students have poor grooming standards
2. They do not possess the right attitude needed to work in the industry
3. They lack in leadership qualities.
4. They need to work very hard in the areas of communication skills.
5. Professional and ethical standards are low among students
6. They do not possess the knowledge of safety and first aid.
7. Their development of skills needed to work in relation to different depts. Is poor.

The study throws light on the following things.

1. It is the responsibility of educational institutions to impart basic skills needed in the hospitality industry.
2. Some of the modules that have been deleted need to be added like, safety and first aid.
3. Knowledge of foreign language will be an added asset in the front office department.
4. The industry is looking for hardworking graduates with good leadership skills. The educational institutions must focus on developing these among the students.
5. The industry is ready to teach all that has entered the market recently like, knowledge of new software. However soft skills remain the responsibility of the colleges.

The educational institutes can never keep pace with the developments in the industry. But the case of Indian education system seems to be really bad. Where foreign studies have shown that students must possess management skills we are still in the dire need to develop students with the basic like grooming, communication, safety, leadership skills and having the right attitude. Most industry prefer to hire graduates from IHMs as they feel they are better aware of the expectations of the industry. However private colleges does shabby job of preparing students for the industry. It is time the private colleges tightened their grip over teaching or else it will be the industry that will ultimately take over the task to train students in skills that deem fit for them.

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Teacher Shortages and Surpluses in Senior Secondary Schools in Ondo State, Nigeria: A Critical Review

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Abstract : *This paper investigated teacher shortages and surpluses in senior secondary schools in Ondo State, Nigeria. As a descriptive research, the study population comprised all the 281 senior secondary schools in the State. The sample was identical with the population as all the schools were involved in the study. The instrument used to collect data was an inventory while the data collected were analysed using frequency counts and percentages. It was found that there were more shortages of teachers in the science subjects and the Languages than arts and social science subjects in all the schools. It was also found that shortages of teachers were more pronounced in urban schools while surpluses of teachers were more distinct in rural schools. It was then recommended that there should always be an equitable distribution of teachers to schools by the State Teaching Service Commission on the basis of class size and teacher quota per subject. Subjects in which there were teacher shortages should be given more priority in the posting of more teachers to schools while teacher surpluses should be discouraged in all its ramifications. Teachers' specialization on subjects' basis should also be taking into consideration in the posting of teachers' to schools.*

Keywords: Teacher; Shortages; Surpluses; Senior; Secondary; Schools

Introduction

Teachers are important inputs into the educational system. Aghenta (2000) described them as “the key factors in formal education.” Adesina (1981) called them the “key input of a highly-skilled labour resource” while Adeyemi (2004) regarded them as the hub of the educational system.

Teachers therefore constitute an important aspect in students' learning. Supporting this point, Umeasiegbu (1991) argued that “the level of performance in any school is intimately related to the quality of its teachers” while “the quality of any school system is a function of the aggregate quality of teachers who operate it.” His argument was in agreement with Moore (1994) contention that competent teachers would improve effective teaching in schools.

Mullens (1993) also supported the argument and remarked that the level of a teacher's subject matter competence is a prime predictor of student learning. He argued that it is not simply the completion of schooling that could contribute to a teacher's effectiveness in the classroom but actual achievement in terms of subject matter competence.

Notwithstanding the importance given to teachers in the schools' system, it was noticed that teachers' shortages have been a common feature in many countries (Dennison, 1984; Levin, 1985). Dennison (1984) for instance, reported a chronic shortage of teachers in Mathematics and Physical Sciences in the UK. He argued that “a situation whereby a school is unable to fill a Physics vacancy constitutes a critical level in balancing staffing and curriculum and it is a real institutional difficulty.” Levin (1985) too examined the problem of teachers' shortages in American schools and remarked that one of the most serious challenges facing American education is the death of Science and Mathematics teachers at the secondary level. He argued that majority of new Science and Mathematics teachers in the US lack sufficient training in the subject they taught.

DES (1986) identified the following three types of teachers' shortages. Overt shortage, measured by unfilled vacancies in a subject and their relationship to demand for tuition in that subject; hidden shortage, where tuition in a subject is given by teachers considered to be inadequately qualified in it or to be lacking the personal qualities required for effective teaching; suppressed shortage, where a subject is under-represented in the timetable because of a lack of suitable teachers (DES 1986).

Considering these shortages, Millar (1988) commented on this problem and remarked that the 'hidden shortage' of Physics teachers in the UK has resulted in the "teaching of substantial parts of the Physics curriculum in many schools by teachers without qualifications in Physics." According to him, secondary teachers may be required to teach outside their specialist areas" perhaps due to the shortages of suitably qualified teachers. In another situation, Straker (1988) observed a serious hidden shortage problem in Mathematics in the UK and argued that the problem is exacerbated at school level by a high wastage rate among Mathematics teachers who often left the teaching profession for other careers. He observed similar critical teacher shortages in Mathematics in Australia and New Zealand.

Supporting the findings, Lowe (1991) found that 20% of those teaching Mathematics in British schools did not have recognised qualifications in Mathematics. This finding was consistent with the findings made by Wilson and Pearson (1993) who reported that "20% of tuition in secondary schools was undertaken by teachers without specialist qualifications in the subjects they were required to teach." Smithers (1994) argued that the problem of getting teachers for Physics, Chemistry and Mathematics in British schools is in an increasing difficulty. Commenting on the problem, McNamara (1995) argued that "until comparatively recently, graduates in the United Kingdom could enter the teaching profession without any formal training." He reported that it was "only since 1974 that there has been a compulsory requirement that graduates must be trained before being able to teach in maintained schools." As such, effective teaching is likely to be absent if it cannot be situated within an overall philosophy of meaning, purpose and achievement as especially as a result of shortages of teachers (McClelland 1995). In this regard, Jones (1997) remarked that teacher education should be seriously considered.

In Nigeria, the shortage of qualified teachers has been reported. Ivowi (1982) for instance, examined the performance of Nigerian students in Physics, Chemistry and Biology in the West African School Certificate examinations and found that "the high failure rate was due in part to the acute shortage of science teachers." These shortages have been attributed to the low salaries and social prestige given to teachers.

In other countries, almost the same situation was found. In the USA, for instance, Straker (1988) reported that salaries in teaching were low in relation to those offered in alternative professions. In Canada, Freeman (1994) reported that "teachers are feeling the pressure not only to improve results but to do it with less money. Pay freezes have become common place across Canada with teachers in populous Ontario taking several days per term without pay." Considering the situation of teachers' salaries in Canada, one could be tempted to believe that the situation was similar to that of Nigeria. The difference was, however, glaring considering the fact that Nigeria is a developing country with a low per capital income (Adeyemi, 1998).

Research findings have shown that teachers are almost always in short supply in schools and their turnover is high because they tend to leave the teaching profession if and when more attractive jobs become available in government, politics or private enterprise (Nwadiani, 1995; Aghenta, 2001). Supporting these arguments, Adeyemi (2008) reported that the supply of qualified teachers to Ondo State secondary schools did not match the demand for them.

Many reasons have been attributed to the high turnover rate among teachers. Some of these reasons include poor conditions of service, low social status in the society, poor salary, lack of incentives and delayed promotional prospects. Commenting on these points, Adeyemi (2008) explained that many teachers leave the teaching profession due to discouragement and frustration resulting from low social status accorded the teaching profession in the society.

A close observation at the demand and supply situations of teachers in Nigerian schools tends to reveal a disparity in the distribution of teachers to schools. The addition of new subjects into the curricula of many schools and the introduction of the continuous assessment as a means of evaluating students' performance has led to the demand for more teachers. Although teachers were needed in the science and non-sciences subjects, the demand for teachers appears to be more pronounced in science subjects than in non-science subjects. Thus, in the African setting, many researchers have attributed the low achievement of students to teachers' inadequate knowledge. Oladejo (1991) for instance, conducted a survey on the teacher factor in the effective teaching and learning of English as Second Language (ESL) in Kaduna State, Nigeria and found that out of the 95 teachers in his sample, 44 (46.3%) were degree holders in English Language having qualifications relevant to what they taught while 53.7% were non-degree holders or teachers specialised in other subjects teaching English Language in schools. He then argued that the problems of getting specialist teachers have been a major problem to students' academic performance.

Supporting this argument, Ihejieta & Nwokedi (1993) remarked that the poor performance of students in Mathematics was the result of poor knowledge in the subject which was brought about by the inadequacy of specialist teachers teaching Mathematics in schools. This finding was supported by other researchers (Ademujimji 2002; Bankole, 2002; Akinduro, 2003; Ogundare, 2005).

There are situations however, where researchers have found surpluses of teachers in schools. Ige (2001) for instance reported that there are instances of getting surplus teachers in schools. He argued that where more teachers are recruited in a particular subject area at the expense of other subjects, there is a tendency of having surplus teacher in schools. In the same vein, Adeyegbe (2002) found in a study that there was surplus teacher especially in science subjects in many Nigerian schools. Supporting this finding, Adeyemi (2003) reported that there were surpluses in the number of teachers in secondary schools in Ekiti State, Nigeria. He argued that the surpluses emanated from posting more teachers to some schools above the teacher quota for such schools. He also reported that certain subjects in the schools' curriculum attracted more teachers than others. This is particularly true of social studies, Yoruba language and Economics where more teachers were found in schools above the teacher quota for such schools.

Fabusuyi (2006) supported this argument reiterated that subject such as social studies, economic and government attract surplus teachers in secondary schools in Ekiti State, Nigeria at the expense of physic, chemistry and biology. In view of this divergence findings and contentions, this study intended to examine shortages and surpluses of teachers in secondary schools in Ondo State, Nigeria in order to correct erroneous impressions.

Statement of the Problem

The conflicting issues of shortages and surpluses of teachers in senior secondary schools in Ondo State, Nigeria have become a matter of controversy among stakeholders in education (Babalola, 2003). Some schools of thought are of the opinion that there are shortages of teachers in senior secondary schools in the State (Adeyemi, 1998). Other schools of thought are of the opin-

ion that there are surpluses of teachers in many Nigerian schools (Ige, 2001). The problem of this study therefore was to determine what level of shortages and surpluses of teachers are in senior secondary schools in Ondo State, Nigeria. In addressing this problem, the following research questions were raised.

Research Questions

1. Are there shortages and surpluses of teachers on subject basis in senior secondary schools in Ondo State, Nigeria?
2. Are there shortages and surpluses of teachers on school basis in senior secondary schools in the State?
3. What measures could be taken to enhance effective distribution of teacher in the schools?

Method

This study adopted ex-post facto and descriptive research design. It was also an ex-post facto research as it was an after fact or after event studies (Gay, 1996). The data are already in place in the schools and they do not involve any manipulation of variables. It was descriptive in the sense that it was a form of planned collection of data from a large population for the purpose of analyzing the relationships between variables (Oppenheim, 1992).

In this regard, the study population comprised all the 281 senior secondary schools in Ondo State, Nigeria by year 2011. These 281 schools were made up of 121 (43%) urban schools and 160 (57%) rural schools. The sample was identical with the population (Moore, 1994) as all the schools were involved in the study. The 281 principals of the schools were the respondents in the study.

Two instruments were used to collect data for the study. These were the teacher shortages and surpluses inventory and the teacher shortages and surpluses questionnaire. The teacher shortages and surpluses inventory consisted of two parts. Part A was demographic. It elicited information on the name of the school, its location, year of establishment, number of teachers in the school, teacher quota and the number of students. Part B was in 5 sections. Section A required data on the staffing position of teachers in the schools. Section B elicited data on whether or not there are shortages of teachers on subject basis in the schools. Section C elicited data on whether or not there are surpluses of teachers on subject basis in the schools. Section D required data on whether or not a relationship exists between shortages and surpluses of teachers in the schools. The shortages and surpluses questionnaire was also in two parts. Part A was demographic while Part B consisted of 12 items that requested information on ways of correcting the imbalance between the shortages and surpluses of teachers in the schools.

The content validity of the instrument was determined by expert in Test and Measurement who matched each item of the instrument with the general questions and research questions. This was to determine whether the instrument actually measured what it was supposed to measure. Their comments were used to effect necessary corrections to the instruments before they were administered to the respondents.

Reliability was conducted for only the questionnaire. It was not conducted for the inventory because the data collected using the inventory were already in the schools. In conducting the reliability, the questionnaires were administered to 30 respondents outside the study area. After period of two weeks, the questionnaires were administered to the same respondents. The data

collected from the two tests were analysed using the Pearson Product Moment Correlation. A correlation of 0.05 was determined which indicated that the instruments were reliable for the study.

The instruments were administered by the researcher and research assistant. After a period of two weeks, the completed copies of the instruments were retrieved from the respondents. The data collected were analyzed using frequency counts and percentages.

Results

Question 1: Are there shortages and surpluses of teachers on subject basis in senior secondary schools in Ondo State, Nigeria?

In answering this question, data on the number of teachers required and the number of teachers available in core subjects and other relevant subjects of senior secondary schools' curricula for year 2011 were collected from the responses of the respondents to the inventory. According to the National Policy on Education, students are required to offer subject for the Nigerian Senior Secondary Certificate Examinations in six major areas. These include English Language, One Nigerian Language, Mathematics, One of the following alternative subjects-Physics, Chemistry and Biology, One of Literature in English, History and Geography and Agricultural Science or a Vocational Subject such as Woodwork, Metal work, Electronics and Home Economics (Federal Republic of Nigeria, 2004). Since students were required to offer a minimum of six subjects along the core subject areas and a maximum of nine subjects for the Senior Secondary Certificate Examination, teachers' requirement and availability in the subjects could not be over emphasized. In this regard, the following subjects were considered in this study in terms of teachers' in post English Language, Yoruba Language, Mathematics, Further Mathematics, Physics, Chemistry, Biology, Geography, Government, Commerce, Economics, Literature in English Christian Religious Knowledge, Arabic, Accounting, Agricultural Science and Metal Work.

In determining teacher requirement in the subject areas, a teacher quota of 1.5 teachers per class of 25 students which is the government-approved norm in the State was used (Ondo State Ministry of Education, 2006). Since teachers' were required on subject specialization in the schools, the numbers of teachers' available in each subject were determined. The data collected were analyzed using frequency counts and percentages. The term teacher deficit as it was used in this study refers to the difference between the teacher quota and the number of teachers in post in the schools. These deficits were either negative indicating surpluses in the number of teachers or positive indicating shortages of teachers. The findings are presented in table 1.

As indicated in table 1, there were more shortages of teachers than surpluses in the various subjects in the schools. Shortages of teachers were found to be common in science subjects such as Physics, Chemistry, Biology and Mathematics. For example in Physics, out of the 1080 teachers required in urban schools in 2011, 484 teachers were in post leaving a shortfall of 596 Physics teachers. In the same vein, out of the 723 Physics teachers required in rural schools in 2011, 705 teachers were in post leaving a shortfall of 18 Physics teachers. Surpluses of teachers were common in arts and commercial subjects such as Commerce, History and Christian Religious Knowledge. In Chemistry, out of the 1620 teachers required in urban schools in 2011, 725 teachers were in post leaving a shortfall of 895 Chemistry teachers. Likewise, out of the 960 Chemistry teachers required in rural schools in 2011, 925 teachers were in post leaving a shortfall of 35 Chemistry teachers. In Biology, out of the 2178 teachers required in urban schools in 2011, 762 teachers were in post leaving a shortfall of 1416 Biology teachers. In the same vein, out of the 1440 Biology teachers required in rural schools in 2011, 1402 teachers were in post leaving a shortfall of 38 Biology teachers. In

Mathematics, out of the 2178 teachers required in urban schools in 2011, 968 teachers were in post leaving a shortfall of 1210 Mathematics teachers. Likewise, out of the 1440 Mathematics teachers required in rural schools in 2011, 1428 teachers were in post leaving a shortfall of 12 Mathematics teachers.

Table 1: Teacher Requirement and Teacher Availability on Subject Basis in Senior Secondary Schools in Ondo State, Nigeria by 2011

Subjects	URBAN SCHOOLS (121)				RURAL SCHOOLS (160)			
	No. of Classes	No. of Teachers' Required (teacher quota) @ 1.5 Teachers per class	No. of Teachers' in Post	Shortages/ Surpluses	No. of Classes	No. of Teachers' Required (teacher quota)@ 1.5 Teachers per class	No. of Teachers' in Post	Shortages/ Surpluses
English Language	1452	2178	740	1438	960	1440	1430	10
French	250	375	341	34	212	318	310	08
Yoruba Language	726	1089	605	484	640	960	945	15
Mathematics	1452	2178	968	1210	960	1440	1428	12
Further Mathematics	724	1086	720	366	480	724	720	04
Physics	720	1080	484	596	482	723	705	18
Chemistry	1080	1620	725	895	640	960	925	35
Biology	1452	2178	762	1416	960	1440	1402	38
Agricultural Science	1452	2178	758	1420	960	1440	1407	33
Geography	605	908	881	27	480	720	702	18
Economics	737	1106	1113	-07	485	728	740	-12
Government	726	1089	1094	-05	479	719	742	-24
Commerce	484	726	736	-10	456	685	690	-05
Accounting	501	751	756	-05	460	690	693	-03
Literature in English	486	726	730	-04	482	723	727	-04
Christian Religious Knowledge	480	720	734	-14	484	717	726	-09
Islamic Religious Knowledge	172	258	242	16	145	218	202	16
History	472	708	717	-09	484	706	726	-20
Metal Work	121	182	176	06	480	720	686	34

The minus (-) sign represents surplus

Shortages of teachers were also found in the Languages. In English Language for instance, out of the 2178 teachers required in urban schools in 2011,740 teachers were in post leaving a shortfall of 1438 English Language teachers. Likewise, out of the 1440 English Language teachers required in rural schools in 2011, 1430 teachers were in post leaving a shortfall of 10 English Language teachers. In French, out of the 375 teachers required in urban schools in 2011,341 teachers were in post leaving a shortfall of 34 French teachers. In the same vein, out of the 318 French teachers required in rural schools in 2011, 310 teachers were in post leaving a shortfall of 8 French teachers. In Yoruba Language, out of the 1089 teachers required in urban schools in 2011,605 teachers were in post leaving a shortfall of 484 Yoruba Language teachers. Likewise, out of the 960 Yoruba Language teachers required in rural schools in 2011, 945 teachers were in post leaving a shortfall of 15 Yoruba Language teachers.

On the contrary, the situation with regards to non-science subject was quite difference. There were surpluses of teachers in many of the subjects. In Economics for example, out of the 1106 teachers required in urban schools in 2011, 1113 teachers were in post leaving a surplus of 7 Economics

teachers. In the same vein, out of the 728 Economics teachers required in rural schools in 2011, 740 teachers were in post leaving a surplus of 12 Economics teachers. In Government, out of the 1089 teachers required in urban schools in 2011, 1094 teachers were in post leaving a surplus of 05 Government teachers. In the same vein, out of the 719 Government teachers required in rural schools in 2011, 742 teachers were in post leaving a surplus of 24 Government teachers. In Commerce, out of the 726 teachers required in urban schools in 2011, 736 teachers were in post leaving a surplus of 10 Commerce teachers. Likewise, out of the 685 Commerce teachers required in rural schools in 2011, 690 teachers were in post leaving a surplus of 5 Commerce teachers. In Accounting, out of the 751 teachers required in urban schools in 2011, 756 teachers were in post leaving a surplus of 5 Accounting teachers. In the same vein, out of the 690 Accounting teachers required in rural schools in 2011, 693 teachers were in post leaving a surplus of 3 Accounting teachers. In Literature in English, out of the 726 teachers required in urban schools in 2011, 730 teachers were in post leaving a surplus of 4 Literature in English teachers. Likewise, out of the 723 Literature in English teachers required in rural schools in 2011, 727 teachers were in post leaving a surplus of 4 Literature in English teachers. In Christian Religious Knowledge, out of the 720 teachers required in urban schools in 2011, 734 teachers were in post leaving a surplus of 14 Christian Religious Knowledge teachers. In the same vein, out of the 717 Christian Religious Knowledge teachers required in rural schools in 2011, 726 teachers were in post leaving a surplus of 9 Christian Religious Knowledge teachers. In History, out of the 708 teachers required in urban schools in 2011, 717 teachers were in post leaving a surplus of 9 History teachers. Likewise, out of the 706 History teachers required in rural schools in 2011, 726 teachers were in post leaving a surplus of 20 History teachers.

On the whole, teacher shortages on subjects' basis were more in urban schools than in rural schools while teacher surpluses were more in rural schools than in urban schools.

Question 2: Are there shortages and surpluses of teachers on school basis in senior secondary schools in the State?

In answering this question, data on the relationship between shortages and surpluses of teachers in senior secondary schools in Ondo State, Nigeria in year 2011 were collected from the responses of the respondents to the inventory. Since teacher deficit as it was used in this study refers to the difference between the teacher quota and the number of teachers in post in the schools. These deficits were either negative indicating surpluses in the number of teachers or positive indicating shortages of teachers. Table 2.1 shows the number of schools with teacher shortages on the basis of urban and rural location.

Table 2.1: Number of Schools with One or More Teacher Shortages

Number of Shortages of Teachers	Number of Schools	Urban Location	Rural Location
1 to 10	125	51	74
11 to 20	38	31	7
21 to 30	2	2	0
31 to 40	2	1	1
41 and Above	2	1	1
Total	169	86	83

As shown in table 2.1, 169 schools had shortages of teachers. The shortages were greater in urban schools than in rural schools despite the fact that there were more rural schools than urban schools in the sample..

In order to ascertain the ratio of the number of schools with teacher deficits in the urban and rural schools, the percentage deficit ratio was determined. This was done by dividing

teacher deficits by teacher quota and multiplying by 100 (Adeyemi, 1998). The essence of finding this deficit ratio was to derive the percentage of the deficits in relation to teacher quota in the schools. Table 2.2 shows the findings in respect of teacher shortages ratios.

Table 2.2: Distribution of Schools Showing Teacher Shortage Ratios

Teacher Shortage Ratio in %	Number of Schools	Urban Schools	Rural Schools
1-20	96	49	38
21-40	68	31	37
41-60	14	8	6
Total	169	88	81

Table 2.2 shows schools with teacher shortage ratios. As indicated in the table, urban schools had more shortage ratio than rural schools. Although the teacher shortage ratio was high in both urban and rural schools, more urban schools (88 in number) had shortage ratio of between 1% and 40% than rural schools (81 in number).

On the other hand, 112 schools had surplus teachers. Out of this number, 78 schools were located in the rural areas while 34 schools were located in the urban centres. The findings are indicated in table 2.3.

Table 2.3: Number of Schools with One or More Surplus Teachers

Number of Surplus Teachers	Number of Schools	Urban Location	Rural Location
-21 and Above (-24)	1	0	1
-11 to -20 (-12)	1	0	1
-1 to -10	110	34	76
Total	112	34	78

The minus (-) sign represents surplus.

In order to determine the ratio of the number of schools with teacher deficits in the urban and rural schools, the percentage deficit ratio was determined. This was done by dividing teacher deficits by teacher quota and multiplying by 100 (Adeyemi, 1998). The essence of finding this deficit ratio was to derive the percentage of the deficits in relation to teacher quota in the schools. Table 2.4 shows the findings in respect of teacher surplus ratios.

Table 2.4: Distribution of Schools Showing Teacher Surplus Ratios

Teacher Surplus Ratio in %	Number of Schools	Urban schools	Rural Schools
-150	1	0	1
-140	1	1	0
-133	1	0	1
-100 to -91	3	0	3
-90 to -81	1	0	1
-80 to -71	3	0	3
-70 to -61	3	0	3
-60 to -51	3	0	3
-50 to -41	3	1	2
-40 to -31	9	2	7
-30 to -21	15	8	7
-20 to -11	27	4	23
-1 to -10	42	18	24
Total	112	34	78

The minus (-) sign represents surplus.

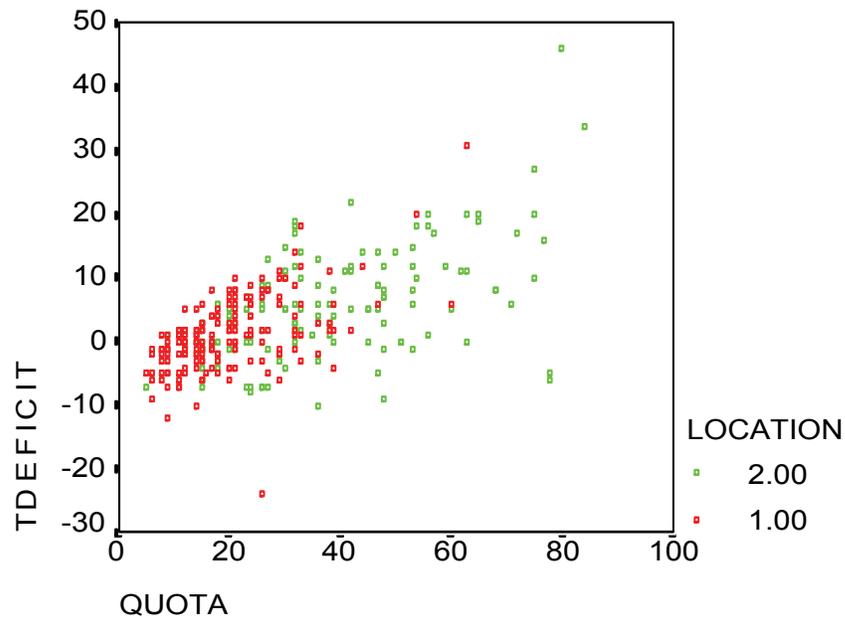
Table 2.4 shows that schools with surplus teachers have ratios ranging between -1% and -150%. In many instances, rural schools had higher teacher surplus ratio than urban schools. The surplus ratios in urban schools were concentrated within the range of -1% and -41% while the surplus ratios

in rural schools were spread between -1% and -133%. The finding also shows that the bulk of the schools had teacher surplus ratio of between -1% and -30% in both urban and rural schools.

On the whole, the findings revealed that the number of schools with surplus teachers were fewer compared with the number having teacher shortages. This was in the sense that 112 schools had surplus teachers while 169 schools had shortages of teachers. The scatter diagrams shown in figures 1 and 2 depict the actual pattern of distribution of the schools with teacher deficits on the basis of the urban and rural location of the schools. Figure 1 compared the teacher deficits with the teacher quota.

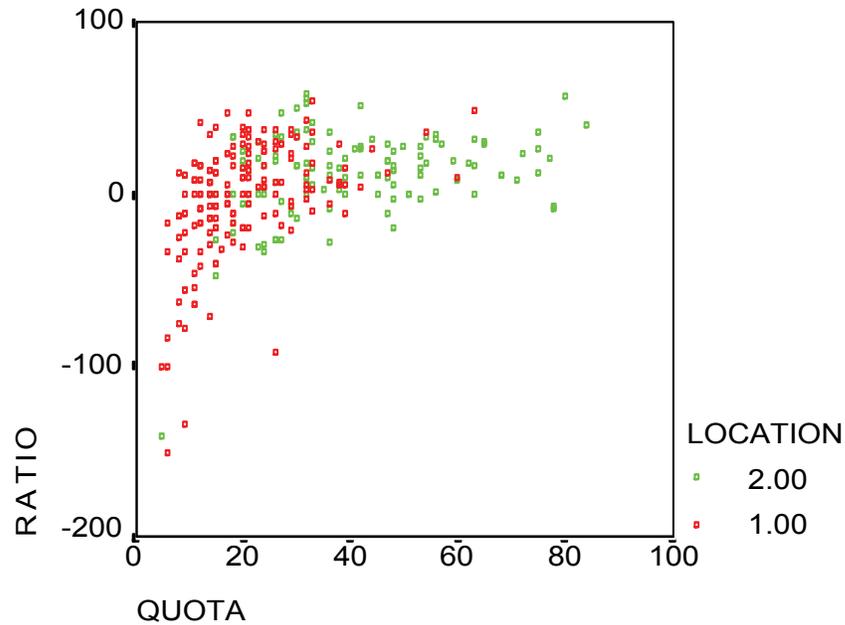
In figure 2, the scatter diagram showed the ratios of the schools with different teacher deficits on the basis of the urban and rural location of the schools. It also confirmed that the deficit ratio was around zero especially for small schools. On the whole, the findings showed that rural schools were not much affected by teacher shortages. They had more surpluses and fewer deficits.

Figure 1
Scatter Diagram Showing Schools with Teacher Deficits and Quota



In figure 1, the scatter diagram confirmed that there was a concentration of schools with teacher deficits in schools with teacher quota of between 5 and 30. The concentration was around zero. On the other hand, figure 2 compared the deficit ratio with teacher quota.

Figure 2
Scatter Diagram Showing Schools with Teacher Deficit Ratio and Quota



** 2 = Urban School, 1 = Rural School.

Question 3: What measures could be taken to enhance effective distribution of teacher in the schools?

In answering this question, data on measures that could be taken to enhance teacher distribution in the schools were collected from the responses of the respondents to the questionnaire. The data collected were collated and analysed using frequency counts and percentages. Table 3 shows the findings.

Table 3: Measures for enhance effective distribution of teachers to senior secondary schools in Ondo State, Nigeria

Items	N	Agree	%	Disagree	%
Equitable distribution of teachers to schools	281	271	96	10	4
Distribution of teachers to schools should be on subject basis	281	244	87	37	13
Subjects in which there were teachers shortages should be given more priority in the posting of teachers to schools	281	260	93	21	7
Teacher surpluses should be discourage in the schools	281	250	89	31	11
Teacher distribution should be based on school quota	281	240	85	41	15
Teachers specialization should be taking into consideration while posting teacher to schools	281	236	84	45	16
Science allowance should be	281	212	75	69	25

given to science Teachers to make them stay on the job Government	281	210	75	71	25
should improve teachers' welfare by given them car loan, housing loan and other fringe benefit	281	195	69	86	31
Science subjects should be given more priority in the posting of teachers to schools.	281	235	84	46	16
Average Total	281	235	84	46	16

In table 3, various measures were given by the respondents that could enhance effective distribution of teachers to senior secondary schools in the State. The equitable distribution of teachers to schools had the largest number of respondents. Out of the 281 respondents, 271(96%) reported that there should be an equitable distribution of teachers to senior secondary schools in the State. The second measure that has a high number of respondents 260(93%) was the measure indicating that subjects in which there were teachers' shortages should be given more priority in the posting of teachers to schools. Another measure in which there were a high number of respondents 250(89%) was the measure given that teacher surpluses should be discourage in the schools. One other salient measure was the claimed given by 244 (87%) of the respondents that the distribution of teachers to schools should be on subject basis. On the whole, 235 (84%) of the respondents agreed that all the items listed in table 3 were good measures that could enhance effective distribution of teachers to senior secondary schools in Ondo State, Nigeria.

Discussion

The forgoing shows the analysis of data collected for this study. It was found that there were shortages and surpluses of teachers on subject basis in the schools. This finding agreed with the findings made by (Ademujimi, 2002; Akinduro, 2003) who reported shortages and surpluses of teachers in secondary schools in Ekiti State, Nigeria.

One salient finding in the study was the high number of shortages of teachers in science subjects such as Physics, Chemistry, Biology and Mathematics in urban and rural schools. The numbers of teachers in post in these subjects were in great shortage to the number required. The finding was in agreement with the findings made by (Young, 1990; Waiching, 1994) who found shortages in the number of teachers in Science subjects in secondary schools. Considering the fact that Mathematics is an important subject in the sciences, the shortage of Mathematics teachers found in this study tends to be in consonance with the findings made by earlier researchers (Lowe, 1991; Wilson & Pearson, 1993) who reported teacher shortages in Mathematics in the UK. In the same vein, the findings of this study agreed with the findings made by Ihejieto & Nwokedi (1993) and Kolawole (2001) who found considerable shortage of Mathematics teachers in Nigerian schools.

Shortages of teachers were also found in the languages. English Language for instance, which is the official language in Nigeria as well as the medium of expression and the springboard of all other subjects taught in Nigerian schools was adversely affected by shortages of teachers. The finding was consistent with the findings made by Oladejo (1991) who conducted a survey on the teacher factor in the effective teaching and learning of English as Second Language (ESL) in Kaduna State, Nigeria. He found that out of the 95 teachers in his sample, 44 (46.3%) were degree

holders. He then argued that the inadequacy of teachers in English Language have been a major problem in Nigerian schools.

It was also found in this study that there were shortages and surpluses of teachers on the basis of school location. The shortages were more pronounced in urban schools while the surpluses were more distinct in rural schools. Surpluses of teachers were found in urban and rural schools in arts and social science subjects such as History, Literature in English, Christian Religious Knowledge, Economic, Government, Commerce and Accounting. Rural schools however were found to have more surpluses of teachers than urban schools. This finding was consistent with the findings made by Adeyemi (1998) who found surpluses of teachers in arts and social science subject in Nigerian schools.

The findings however negated the findings made by Bankole (2002) and Akinduro (2003) who reported the higher number of shortages of teachers in rural schools and a higher number of surpluses of teachers in urban schools.

The findings of this study indicating that urban schools had more shortages of teachers than rural schools suggest that the rate of recruitment of teachers into urban schools might not have matched the rate of increase in class size as a result of the influx of students' to urban schools. These findings agreed with the findings made by Nwadiani (1996) and Adeyemi (2008) who found that teacher supply did not match the demand for them in many Nigerian schools.

The equitable distribution of teachers given in this study as a measure for combating shortages and surpluses of teachers agreed with the findings made by (Aghenta, 2000; Ige, 2001) who suggested this measure for effective school management. How effective the implementation of the measure by the Ondo State Government is a subject to further research.

Conclusion

It was concluded that there were shortages of teachers in English Language, Science and Mathematics in urban and rural schools in the State. Although there were surpluses of teachers in arts and social science subject, the findings of this study have led the researcher to conclude that rural schools had more surplus teachers than urban schools. Although shortages of teachers were found to be more in urban schools than in rural schools, the shortages of teachers were more pronounced on subjects' basis than on the basis of school location. It was therefore concluded that teacher deficit whether shortages or surpluses is a function of class size.

Based on the findings, it was recommended that the Teaching Service Commission in Ondo State, Nigeria should always make an equitable distribution of teachers to schools on the basis of class size and teacher quota per subject. Subjects in which there were teacher shortages should be given more priority in the posting of more teachers to schools while teacher surpluses should be discouraged in all its ramifications. Teachers' specialization on subject basis should also be taking into consideration in the posting of teachers' to schools while the State government should improve teachers' welfare by given them car loan, housing loan and other fringe benefits.

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Eradication of Rural Poverty through Women Self-Help Groups in Karnataka

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Abstract: Poverty is ubiquitous in human societies though its magnitude and intensity vary sharply across the sections of the society. The Indian experience in post- Independence decades has been that govt led programmes to help the poor do have an impact but are not trustful enough to put the poor in development orbit. However there are signs of many and large changes in India's poverty scenario. These are likely to offer opportunities to the govt to play an important role as a facilitator and intervener in implementing anti-poverty strategies and programmes. In this paper an attempt has been made to address the burning problem of poverty through self- help groups. It is based on case study method in a backward district of Karnataka, namely Kolar. Where most of the people depend on agriculture, rainfall is low and dry farming is prominent. Thus poverty is rampant; the SHG's are playing an important role in empowering the rural women to bring out from the vicious circle. Thus these SHG's are successfully eradicating poverty of the downtrodden sections of rural women. These groups are helping out the rural women to participate in various programmes of the government without fear. Finally this movement is serving as an instrument of social change essentially out of empowerment of women. Improvement in the literary levels and children's education (particularly girls education), housing facilities, abolition of child labour, decline in family violence and banning of illicit distilleries in the villages. Women have acquired better communication skills and self-confidence; they have also acquired better status within their families and in public life.

Keywords: Women, Poverty, Self-Help Groups, SHG's, Gender, Employment, Rural Development, Stree-Shakthi, Swashakthi

Introduction

Poverty remains a serious problem even after the economy has experienced unprecedented buoyancy for about a decade and a half. The percentage of Poor has, of course, declined from 55 in 1973-74 to 27.5 in 2004-05; it is still a high level of poverty for an economy experiencing high growth. As for absolute numbers, there were 321 million poor in 1973-74, 320 million in 1993-94 and 302 million poor in 2004-05.

Table: 1. Percentage of population below poverty in Karnataka and India

	1973-74	1977-78	1983	1987-88	1993-94	2004-05
Kar-rural	55.14	48.18	36.33	32.82	29.88	20.8
All India	56.44	53.07	46.65	39.03	37.27	28.3
Kar-urban	52.53	50.36	42.82	48.42	40.14	32.60
All India	49.01	45.22	40.79	38.20	32.36	25.70
kar-Both(R+U)	54.87	48.78	38.24	37.53	33.16	25.0
All India	54.88	51.32	44.48	38.86	35.97	27.5

Source: Estimates released by planning commission

Poverty in Karnataka has declined over the years as per the estimates of planning commission. The percentages of people live below poverty line in urban areas are more than the rural poor in Karnataka as well as in all India level. But the number of people living in rural areas is more than

urban areas. Compared to all India level the number of people who live below poverty line in Karnataka is less

Trends in Poverty

During nineties, the tendencies of slowing down of rural employment growth and slow down in the growth momentum of rural non-agricultural activities appear to have affected the pace of decline in rural poverty and widened rural-urban disparities

Rural per-capita total expenditure (PCE) per month (Ravi 2000) at 1990-91 prices which was Rs.158 in 1970-71, increased steadily to Rs.213 by 1989-90 and declined sharply by 5 percent to Rs.202-204, except in 1997 when it reached the highest level of Rs.235. Its annual trend growth rate fell to 1.2 percent during the 1990's from 1.5 percent during 1970-89 in contrast; there has been acceleration in the trend growth rate of the same in urban areas where the annual growth rate was 1.45 during 1970-89, which almost doubled to about 2.8 percent during 1990's. Clearly, rural-urban disparities have widened during the nineties. During 1970-89, the rural-urban differentials expressed as a ratio of urban PCE to that of the rural, increased at a moderate rate of 0.1 percent per annum, which accelerated to 1.6 percent during 1990s. The benefits of better income growth during nineties seem to have benefited the urban areas more than the rural, thus aggravating the urban-rural divide. This is in conformity with the finding that the employment growth during the 1990s concentrated in urban areas. (Bhalla, 2000).

Expenditure inequality widened in both rural and urban areas, though statistically not significant in rural areas. Gini coefficient estimate of urban consumer expenditure increased at a high rate of 1.4 percent per annum during the nineties. However, as will be seen, the urban poor also gained substantially since the increase in per capita expenditure more than compensated the adverse effect of rising inequality.

The rural bottom 30 percent experienced a deceleration in the growth rate of their per capita expenditure during the 1990s. In contrast, their urban counterparts had a higher growth rate of per capita expenditure despite an increase in the expenditure inequality. While the growth rate of per capita expenditure of the rural bottom 30 percent declined from 1.71 percent per annum during 1970-89 to 1.44 percent to 1.70 percent during the same period. Though, all the urban classes gained during the 1990s, the top 30 percent gained the most.

Rural poverty declined at an annual rate of 2.5 percent during the seventies and eighties, most of it during the 1980s and at 0.73 percent during 1990s. Poverty levels declined steadily from 57 percent in 1970s to 33 percent in 1989-90. During the seventies and eighties, per capita real expenditure of rural households registered a significant increase from Rs. 158 in 1970-71 to Rs.213 in 1989-90. Its subsequent sharp falls during 1990-91-1992 had an adverse effect on rural poverty pushing the poverty ratio again to 44 percent in 1992. Thereafter, it remained more or less at 40 percent except in 1997 when it declined to 33 percent. Since the rate of decline of rural poverty has been lower than the rate of growth of rural population during 1990s, the absolute number of poor would have increased in the last decade. On the other hand, urban poverty declined at the rate of 2 percent per annum during the seventies and eighties and at 3.05 percent during 1990s. The acceleration in the decline of urban poverty is due to the high-income growth achieved during the period of liberalization, which seems to have percolated to the bottom through trickle down effect. The decline of urban poverty would have been sharper had there been no worsening of inequalities. The notion that poverty is getting concentrated in the rural areas is clear from the preceding analysis. The widening rural-urban disparity in incomes should be a matter of great concern in a country like India.

Poverty Scenario: Statistical View

Both urban and rural poverty ratios, which were fluctuating until 1973-74, have been declining since then. The earlier phase was broadly characterized by the pre-green revolution technology and early phase of the green revolution era. During this period the poverty levels were determined mainly by the weather fluctuations and partly by the (primary and secondary) consequences of institutional reforms such as land reforms and the spread of co-operatives. In several states such as Andhra Pradesh, Bihar, Kerala, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Uttar Pradesh and West Bengal, the rural poverty ratios were higher than the all India level during 1957-58 to 1973-74. During 1966-67 and 1967-68, the years of consecutive droughts, poverty levels shot up to 80% in Uttar Pradesh.

In the second phase, which coincided with the post-green revolution phase and poverty alleviation programmes era, poverty levels in rural and urban sectors declined considerably in all most all the states / Uts. The lower levels of poverty in majority of the regions during 1987-88, a year of drought compared to the previous period i.e 1983, only confirms the effectiveness of poverty alleviation programmes like wage employment programmes and food security measures. During this period, the rural and urban poverty levels registered a sharp decline. The intensity of poverty also declined considerably in both rural and urban India.

Poverty Alleviation Approach to Rural Development

Unemployment and underemployment are the chronic problems in rural areas. They remain untracked effectively in spite of a series of schemes in this direction during the planning era. The cumulative effect of this situation over several years is large-scale poverty in rural India in the midst of surplus manpower and other resources. Poverty may be defined as a person's lack of command over minimum basic requirements of life like food, clothing, housing, medical and education, etc.

The reduction of poverty should, therefore, receive the highest priority in the development strategy. Rural poverty is visible, by and large, in the form of poor dietary conditions with malnutrition, primitive shelter, poor health, low level of literacy, high propensity to consume with very low level of saving and unproductive agriculture. Still many rural poor suffer even for want of basic amenities such as safe drinking water, reasonable food and housing, primary education, and medical facilities.

There are difficulties in measuring unemployment in rural areas with a large proportion of self-employed population. Further in rural areas workers cannot -be easily classified into employed and unemployed, since almost everyone is employed for some part of the year and unemployed for some other part. Again some households need additional employment for supplementary income while others need employment for regular earnings. In rural areas, there is still a category of unorganized labour force not benefited by developmental programmes and who are solely dependent on wage earnings. It is such people who need regular full-time employment throughout the year through employment guarantee schemes.

The most disturbing factor in recent years has been the faster increase of agricultural labourers and gradual decline of number of cultivators. Due to division and sub-division of landed property from generation to generation and consequent creation of tiny holdings and growing indebtedness, cultivators with small holdings are gradually converted into landless labour. Due to the decline of demand for products of village artisans, village carpenters, potters etc. are converted into agricultural labourers. In the absence of ownership of physical assets like land, etc. the rural poor aspire for more children whom they consider as their assets and on whom they have to depend

during the old age. Chronic unemployment and underemployment are the principal cause of widespread poverty and its continued perpetuation. This situation calls for multi pronged strategy aiming at

(a) Developing the production resource base of the rural poor, and (b) Providing them opportunities of supplementary and direct employment, particularly during the lean seasons. It was with this view that certain programmes were launched during the, planning era. The major programmes under this scheme are

Small Farmers Development Agency(SFDA),

Marginal Farmers and Agriculture Labourer Development Agency(MFAL)

Minimum Needs Programme(MNP)

Food for Work Programme(FWP)

National Rural Employment Programme(NREP)

Integrated Rural Development Programme(IRDP)

Training of Rural Youth For Self-Employment(TRYSEM)

Currently the Government of India has several schemes which are women specific. These schemes are -located in different departments and ministries of the Government of India, such as Rural Development, Labour, Education, Science and Technology, Welfare and Women and Child Development. In 1985 the Government of India constituted a. separate department in the Ministry of Human Resource Development for the development of women and children. The Bureau of Women's Development in the department (ministry of HRD), which is the national machinery responsible for the advancement of women in India, plays a major role in this endeavor.

Women specific Rural Development Programmes

1. Training-Cum-Employment-Cum-Production Centers

The common name of this programme is 'NORAD' (Norwegian Agency for International Development). This was designed in 1983 to assist training programmes for .women and it gives financial assistance to public sector undertakings/ corporations/ autonomous bodies/ voluntary organisations to train women, in non traditional trades and provide employment on a sustainable basis.

2. Support to Training and Employment Programme for WomenSTEP, a programme for rural women was launched in 1987. Its aim and objective was to upgrade the skills of poor and asset less women by giving them specific training and creating conditions of employment for them on a sustainable basis in the traditional sectors such as agriculture, dairying, fisheries, sericulture, handlooms, handicrafts etc

3. Mahila Samridhi Yojana

In October 1993, the Government of India launched a scheme called Mahila Samridhi Yojana (MSY). This is a central sector plan scheme implemented through the network of post offices in rural areas. The Department of Women and Child Development is the nodal institution for implementing this scheme. Mahila Samridhi Yojana encourages every rural adult women to open an MSY account in her village post office in which she may deposit her savings. For an amount up to Rs. 300/- per year, with a one year lock-in period, government contributes 25 per cent.

4. National Commission for Women

In view of the suggestions emerging at various forums and recommendations contained in the reports of various committees and commissions, the Government of India realised the importance of various issues concerning women's status. Accordingly it has set up a statutory National Commission for women, consisting of Chairperson with six members representing trade

unions, voluntary organisations, administration and social services, with a member secretary who may be an expert in management, sociological movement or a member of civil service.

The main task of the commission shall be to study and monitor all matters relating to the constitutional and legal safeguards provided for women, to review the existing legislations and suggest amendments wherever necessary. The commission shall monitor the proper implementation of all the legislations enacted to protect the rights of women, so as to enable them to achieve equality in all spheres of life and equal participation in the development of the nation.

The National Commission for women was set up on 31st January, 1992. The main objectives of the commission are to investigate, examine and review all matters relating to the safeguards provided for women under the constitution; review of the implementation of both women-specific and women-related legislation and suggest amendments wherever needed and as an agency to fulfill surveillance and facilitate redressal of grievances of women. For effective performance of its functions, the commission has set up a legal unit. Apart from the legal unit, three more Expert Committees were set up to examine and review the provisions of the constitutional and other legislative measures affecting women. Some of the matters being examined by the commission are:

The Commission of Sati (Prevention) Act,
Criminal Procedure Act 1973,
Sale of Minor Girls-Need' for Amendment of Indian Code of Criminal Procedure and the Child Marriage (Restraint) Act,
Guardianship law,
Amendment of Hindu Marriage Act,
Compulsory Registration of Marriages in India etc

5. Central Social Welfare Board

The establishment of Central Social Welfare Board in 1953 was a landmark not only in the history of social welfare but in providing services to women and children, primarily through women's organisation. Several programmes like welfare extension-projects, socio-economic programmes hostels for working women, public co-operation camps for women in border areas, financial assistance to homes for destitute women were a series of measures which provided a strong base for women welfare. Mahila Mandals were promoted and strengthened as part of rural development efforts in India. The Committee on Women Education was created at the instance of the chairperson of the Central Social Welfare Board. The recommendation of the Committee covered subjects like:

Expanding girls' education;
Creating public opinion to overcome prejudice against girls and boys;
Parity between girls and boys and
Special central assistance for promoting girls education.

6. Committee on Women's Status

Another landmark in the history of women's welfare and development was the appointment of a Committee on Status of Indian women under the chairmanship of Mrs. Phulrenu Guha a social and political worker in 1971. The main task of the committee was to undertake comprehensive examination of all the questions relating to the rights and status of women in the context of changing social and economic conditions in the country and problems relating to the advancement of women. The Committee opined that the dynamics of social changes and development had adversely affected a large section of women and had created new imbalances and disabilities in regard to sex-ratio, life expectancy, infant mortality, illiteracy, work participation and migra-

tion. The Committee urged for planned intervention to improve the conditions of women in India. The major outcome of this report was the National Plan of Action, 1976.

Women's participation in various formal and non-formal organisations is very much affected due to lack of awareness, knowledge and abilities. They are practically least mobilized except that they exercise their franchise at the time of elections as dictated by others. Political institutions are still regarded as male zones in which rural women seldom dare enter due to many social constraints and limitations. There is a low number of women members in the political parties hence this affects the number of women representatives to elected bodies. The average percentage of women in national legislatures globally in 1987 was 10. Since Indian women have expressed their willingness to participate in political organizations, attempts should be made to create a favorable climate. This needs all round efforts. Women have to be educated on this issue. Men also needed to be persuaded to extend better opportunities for women's participation. At the village level statutory women's panchayats should be established with autonomy and resources of their own for the management and administration of welfare and development programmes for women and children.

7. Rashtriya Mahila Kosh

The National Credit Fund for women called the Rashtriya Mahila Kosh was set up during 1992-93 with a major objective of meeting the credit needs of the poor women particularly in the informal sector. It was set up as a society under the Societies Registration Act, 1860. The Minister of State of Women and Child Development is the Chairperson of the Kosh.

8. Jawahar Rozgar Yojana

In April 1989, the two ongoing employment programmes viz., National Rural Employment Programmes and the Rural Landless Employee Guarantee Programmes were merged into a single rural employment programme known as Jawahar Rozgar Yojana. At least 30 per cent of the employment is to be provided to women under this Yojana.

9. Indira Awaas Yojana

Indira Awaas Yojana (IAY) was an important component of Rural Landless Employment Generation Programme. It has become the part of Jawahar Rozgar Yojana since 1993-94; IAY aims at construction of dwelling unit free of cost for the poorest of the poor belonging to SC/STs and the free bonded labour families. Allotment of the house is to be done in the name of the female member of the beneficiary household. Alternatively, it can be allotted in the joint name of both the husband and the wife. The length area of the house should be around 20 sq., meters. The house should have a kitchen, smokeless chulha and sanitary unit.

10. Integrated Rural Development Programme (IRDP)

IRDP was launched on 2nd October, 1980 all over the country. This programme is the major poverty alleviation, programme in the field of rural development. IRDP aims to enable the identified rural families to cross the poverty line: To ensure better participation of women in the development process, it has been decided that at least 40 per cent of those assisted should be women and 3 per cent from the physically handicapped.

For facilitating greater coverage of women under IRDP, group approach for women beneficiaries was extended to all districts from 1st January 1990. under this approach group of women for thrift and credit societies would be provided matching grant for a revolving fund equal to the amount of savings generated by the group subjected to ceiling of Rs. 15,000/- per group.

11. Development of women and children in rural areas (DWCRA)

This programme was launched in 50 districts of the country in 1982-83 as a centrally sponsored scheme of the Department of Rural Development with UNICEF cooperation to strengthen the women component of poverty alleviation programmes.

The objective of DWCRA is to raise the income levels of women of poor households so as to enable their organised participation in social development towards economic self-reliance. The primary thrust of DWCRA is on the formation of group 15-20 women from poor households at the village level for delivery of services like credit and skill training, cash and infrastructure Support for self-employment.

Selection of district is made on the basis of low female literacy rate and high infant mortality rate so that the most backward sections of the rural population can derive the benefits first. DWCRA is supported by the District Rural Development Agency through a team of functionaries supervised by an assistant project officer.

Role of the Council for Advancement of People's Action and Rural Technology (CAPART) in DWCRA CAPART, through voluntary agencies, supplements the government's efforts in reaching out to the poor rural women. Grants are given to voluntary agencies to implement projects for providing income generation opportunities to women. Training of programme functionaries under the DWCRA is greatly emphasized. The National Institute of Rural Development (NIRD), Hyderabad has been entrusted with the responsibility of coordinating the DWCRA training programmes.

A comprehensive training manual for Gram Sevikas and APOs under DWCRA has been prepared. Since main focus of DWCRA is on income generation activities for women. It is necessary that their activities must be economically viable. Thus some state governments have issued orders declaring the DWCRA groups approved sources for the supply of bulk articles required by the government departments. The Gram Shree Malas organised by the Council for Advancement of People's Action and Rural Technology (CAPART) are used as a forum for the sale of rural products and to encourage the women's groups.

12. Employment assurance scheme

The Employment Assurance Scheme was launched in October 1993, in 257 districts in which the Revamped Public Distribution System (RPDS) is in operation. The primary objective of EAS is to provide gainful employment during the lean agricultural season manual work to all able bodied adults in the rural area who are in need and who are desirous of work, but cannot find it. The assurance of 100 days employment extends to men and women over 18 years and below 60 years of age. Besides, IRDP, NREP and DWCRA the socio-economic scheme for women of Central Social Welfare Board is also now being implemented through voluntary agencies for socio-economic projects in the, rural areas. Financial and technical assistance is provided for giving training to women followed by production and marketing. The projects like dairy, tailoring, food preservation, masala making etc. do not give full employment to women but only supplement their family incomes. However, experience has shown that unless these projects are ancillaries to some industry, thereby giving regular service, they do not succeed. Another problem is that of purchase of raw material at the right time from the right place and at the right rate. Moreover these projects do not give sustained work to women particularly the landless. The projects should be capable of giving work to women on long term basis.

No doubt the government has launched several programmes to improve the status of rural women and has invested huge amounts on these schemes. Still their impact is negligible or marginal at the most, due to faulty implementation of these schemes. Men folk should be convinced that raising the status of women is necessary for the success of any plan because it is the women

more than men, who have to acquire new values, adopt new attitudes, change their life-styles, shoulder new responsibilities and play new roles in the changing socio-economic context of rural community.

One of the important policy document include the National Plan of Action for women adopted in 1976 which became a guiding document for development of women till 1988, when a National Perspective Plan for Women (1988-2000) assisted by a core group of experts is more or less a long term policy document advocating a holistic approach for development of women.

Appropriate technology takes into consideration local practices and resources. It should be labour intensive, but non-capital intensive. It should not create a cultural shock nor should it pollute the environment. Women suffer from drudgery and various tasks such as water, fuel and fodder collection and unemployment. We need technology appropriate to such situations. In order to make life of rural women brighter and lighter, there is need for introducing appropriate technology in which rural women have to be trainers and motivators.

Gender and Development

It is well recognized that women in general are more vulnerable. Even after several policy interventions they face acute discrimination and marginalization in the labour markets. Although they work for much longer hours than men and their work contributes significantly to the family 's incomes, their work gets less recognition in terms of official, statistics relating to workforce participation rate(WPR).Even when they are in the workforce, most of them work as marginal workers and do not have independent earnings. Further, there as been decline in their workforce participation, particularly in rural areas in the post reform period between 1993-94 and 1999-2000 there is near stagnation in the number of female workers in the country as a whole and an absolute decline in the number of female workers in rural India leading to considerable decline of female WPR as a percentage of male WPR. Although there has been a setback in the overall growth of employment, both in rural and urban areas, females have witnessed sharper decline as compared to their male counter parts. An overwhelmingly a large percentage of women workers are illiterates and are in the unorganized sector. An important aspect of the labour market scenario is considerably higher level of unemployment among educated women – both in rural areas and urban areas- as compared to their male counter parts.

Yet another aspect of labour market discrimination against women is revealed by the differentials in the male and female wage rates for identical work. Although in some sectors small improvements are visible, wage rates of females continue to be considerably less than the wage rates of males. All these have manifested into somewhat higher level of poverty among female population in our country as compared to male population.

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The UN Millennium Declaration has identified poverty as the greatest challenge of our times. Poverty eradication is one of the Millennium Development goals, which aims to halve the proportion of people living in extreme poverty by 2015. Seventy five percent of the world's poor live in rural areas, and the majority of them are women.

Last year's Report of the Secretary-General on Decade for the Eradication of Poverty (1997-2006) (A/59/326) highlighted the role of Micro credit in poverty eradication.

As documented by several studies in the South-Asian countries, Micro credit has been instrumental in transforming the lives of the poor rural women by creating self-confidence and new roles for them. This concept, which originated in Bangladesh, has now spread to more than 70 countries.

VIVAT International, whose members are working in 62 countries, is concentrating on poverty eradication and women empowerment, especially in rural areas. Hence, we have been promoting self-help groups and micro-credit for poverty eradication and empowerment of women.

I would like to highlight for you one of such successful experiment in poverty eradication and women empowerment through 2 Self-help Groups in Karnataka namely Stree Shakthi and Swa-shakthi in Karnataka.

Review of Literature

Issues related to women have been attracting some attention in recent years, especially in the context of social change and its impact on women's participation in decision-making processes. Involving women in the development process has been engaging the attention of our policy makers in recent years not only for hastening the pace of economic development but also for achieving a wider spread of the benefits of development. A number of studies have been carried out in the areas. A review is made of some of the recent works.

One of the major works done in the area of women and development is the book on women and social policy written by Constantina Safilios Rothschild (1974). She has beautifully presented the theoretical background of social policy related to women, social policy to liberate women and also to liberate men have been discussed. Social policy, to liberate society from sexism has been dealt nicely along with social policy to liberate marriages, the institution of the family and family life. The main thesis of the book is that under increasing political and social pressures, men will have to go beyond tokenism not only to relinquish marginal power positions but also to give up some essential power posts. The transition to liberation is quite slow and painful but eventually life; society and all the relationships between women and men will be much more honest open and rewarding then they are at present chances for happiness and self actualization are going to be much brighter both for women and men.

N.J. Usha Rao in her book 'Women in a Developing Society' (1983) has tried to take stock of the existing positions of women in different regions. Where do our women stand in the great task of national development? What is the status of the Indian women in the social, economic, legal, educational, moral and political spheres? How far have our women progressed in their quest to-

wards equal status and equal opportunity? Rao has particular interest in women belonging to the weaker sections. It is believed that her study would be useful to both governmental and non-governmental organisations engaged in plans and programmes for the development of the country.

MN. Srinivas in his paper the 'Changing Position of Indian Women' (1976) has discussed the subject which is vast in nature and of bewildering complexity. He has restricted his discussions to Hindu women only. Feminine preoccupation with ritual provides Hindu Women with power over men. Since the rituals are concerned with the welfare of the household and its members, men are appreciative of the fact that women are looking after an important area of family life.

In another study 'Role of Women Managers in India' of the Jamana Lal Bajaj Institute of Management Studies, University of Bombay 1976, an effort was made to assess the extent of participation, acceptance by the managerial environment, effect of family responsibilities besides problems faced by women entrepreneurs.

The review of literature in the area of women and development shows that prerequisites for the improvement of women's position such as women's awareness of their own situation, men's understanding of women, the rationalization of domestic life, the raising level of education, economic stability, the organised activities of women are valid and important. Though the principle of equality between the sexes has indeed been established, the women cannot enjoy it unless they are actively involved in the decision-making process.

The book "The Role of Women in Rural Development" by S. Giriappa (1974), attempts to evaluate the role of women in the rural and semi-urban ' areas with reference to many activities in which they partake (both economic and domestic) in work conditions, family maintenance etc. The role and status of women have been undergoing a definite improvement in recent times. This study has highlighted the emerging trends towards this direction. Since the impact of the recent development programmes has not yet been augmenting on women, it is but essential that proper execution of project is carried thoroughly to achieve the development goals.

An attempt has been made in the six volumes of "Contemporary Indian Women: Collected Works" presented to highlight the problems of women, their present status and the challenges they face with their counterparts. More than sixty scholars have submitted their contributions dealing with various facets of and challenges to contemporary women. The first volume focuses on 'Modernisation and Women's Development.'

Nasreen Rustomfram has underlined the need for making rural development more gainful for women and suggested beneficiary-oriented schemes for women. Anjula Gupta has taken up the issue of modernity among working women in India. She has shown, on the basis of empirical evidence that the whole set of institutions in which the working women participate and work, shape their experiences, values, beliefs and behavior patterns in the direction of modernity. Kumud Sharma has discussed research and policy perspectives in the context of women and development and emphasized the need for effective participation of 'invisible women' to set in motion the process of need based goals to ensure equality, autonomy and dignity for women in a new social context. Kamla Bhasin has discussed the ugly face the development and suggested that we should make a fundamental shift in our perspective of locating women in the process of reconstruction, of understanding that a development programme without women at its centre is no Programme at all.

"Lengthening Shadows: Status of women in India" by Poonam S. Chauhan (1996). The author has made an attempt to measure the existing gender inequalities in the society and economy. The book consists of seven chapters. Chapter one sketches the status and position of women in histor-

ical perspective, discusses about gender discrimination in women's lives and its impact on their conditions. Chapter two outlines the representation of women at different levels of education. It presents the national level scenario in detail. It gives a state wise analysis of women's education, focusing on their participation in rural and urban setting, as well as on religious influences.

"Developing Rural Women" (A Case Study of TRYSEM) 1990 by Vidyulata, examines the extent to which the Training of Rural Youth for Self Employment (TRYSEM) programme is helpful in raising the status of rural women and also the development of entrepreneurship among them. It raises the issues about the skill formation, entrepreneurship development, employment and income in relation to the social status of women. It makes a significant contribution in highlighting the problems and lacunae in the implementation of the programmes. The study provides interesting insight into the operation of rural development programme. It also highlights the lack of proper follow up action after implementing the policies and programmes.

"Empowering Women for Sustainable Development" (1994) by Leelamma Devasia and V.V. Devasia. The book elucidates the struggle of women in some slum areas, in Nagpur City to achieve social justice, economic independence and freedom through meeting their needs without compromising the ability of other to meet their own needs. The study explains the potentialities of the poor exploited and illiterate women, the fulfillment of their dreams and aspirations, the endurance of their patience and sufferings and the meaning and fruitfulness of their achievements. These women understood, though gradually and painfully, the need of conscientization, in their every day life together with social as well as economic progress in their family and slum community. To achieve empowerment, these women struggled against societal structures, systems, formidable inequities and their own degradations. Some of them became disenchanted during the course of the struggle, but majority of them fought against all odds because they have realized that there were no alternatives to sustainable development than their own empowerment.

The Community Action for Development (CAD), a non-governmental organisation, tried to help women in different slums to attain sustainable development. CAD believes that sustainable development for women is that which lasts and hence dynamic enough to meet their special, individual emerging and common needs. Women's development was conceptualized in the context of holistic development. The organisation realized that empowerment of women and sustainable development demanded empathy, rapport building, participatory action, efficient management of resources in such a manner that contributed to equality, social justice and freedom while avoiding social and family conflicts and disruptions. This implied strong community participation of women and their self-help. CAD believes that democracy, to be real for the exploited, illiterate and poor women, must be sustainable because women in our democracy, especially those who belong to the slum, rural and tribal areas, have to be given a place that is due to them in policy planning and in the implementation of various schemes and plan.

Role of women in the Twenty-First Century" edited by Surut Gupta and Mukta Gupta (1996). This book covers diverse aspects of women's life and their problems and discusses complexities related to this. This is a multidisciplinary investigation into various aspects of the pressing socio-economic and political problems facing Indian women. It explores that how after integrating women into development will solve problems caused by development plans and policies which have neglected or been detrimental to women. This book can be a guide to recent thinking and literature about women and their development.

"Empowering Women-An alternative strategy from Rural India" by Sakuntala Narsimhan, (New Delhi, 1999) is a valuable addition in the existing literature on women empowerment. The study is based on the primary data collected from 150 respondents in 33 villages of Andhra Pra-

desh; secondary data have also been used to arrive at conclusions. Ms. Narsimhan focuses on rural scheduled castes and scheduled tribes women who are triply disadvantaged, as women, as rural persons and because of their low caste status. The main objective of the study was to assess the effectiveness of an alternative strategy of development and empowerment of women particularly of poor women from socially disadvantaged communities in India. It is basically an evaluation of the strategy of empowerment, adopted by an NGO named Action for Welfare and Awakening in Rural Environment (AWARE).

The study reveals that in every areas of empowerment (earning, education, health care, status access to and ownership of resources, including land, autonomy and assertiveness) women, who has' been exposed to the awareness generation strategy fared significantly better then women who have not been exposed to awareness generation. This has also been borne out by the 14 case studies of women empowerment which are given in the Chapter-VIII of the book.

The 73rd Amendment Act 1992 has provided one third reservation for women including those belonging to SCs and STs. As a result of this provision there would be about 11 lakhs of women who have become members and chairpersons of Panchayats. Among them about 2.5 lakhs would be women belonging to SCs and STs categories. Studies reveal that most of these women are not aware of the basics of decentralised governance, planning and development. Awareness and psychological empowerment of these women are indispensable for building confidence among them and for acquiring necessary knowledge and skill to play their role effectively at grass root level.

"Experiments in Rural Development", by Krishna Kothari, Anmol Publications Pvt. Ltd., New Delhi. Since long rural development has remained the focus of attention of planners and policy-makers. In this process" several schemes and programmes have been launched with different strategies and approaches. However, the impact of these programmes needs a critical examination to ascertain whether these programmes have yielded the expected results or not. In view of this the book under review is an attempt to examine the performance and impact of three different types of programmes taken up by different agencies aiming at socio-economic upliftment of the weaker sections including the small and marginal farmers.

The author has done a comparative study of three different schemes implemented by three different agencies in Belthangady taluk of Dakshina Kannada district of Karnataka. The schemes selected for study are:

1) Farm Clinic (FC) being implemented by Syndicate Agriculture Foundation, a national level farmer's forum organised with the assistance of Syndicate Bank. The programme aims at helping the small farmers including weaker sections to improve their socio-economic conditions through providing the entire range of inputs, advisory services and credit facilities. This programme can "be categorised as 'Financial Institute oriented rural development project' initiated by the Syndicate Bank.

(2) Another programmes is called Sri Kshetra Dharamsthal Rural Development Project (SKDRDP) being initiated and implemented by Dharamsthal temple a voluntary agency, religious philanthropy oriented project. The target group is again small farmers.

(3) The third programme is well known Integrated Rural Development Programme (IRDP) which is designed and executed by the government. This is the single largest programme which aims at poverty alleviation through economic activities in turn creating employment and assets. Hence this study is very significant in the sense that it deals with three schemes taken up by three different agencies like a financial institution, a voluntary religious agency and the government with a similar view in focus.

Various researchers have studied micro-finance in different perspectives. The earlier studies were mostly on the impact of micro-finance programmes on poverty alleviation. Later studies recognised the significance of women participation in the micro-finance activities. The impact of women borrowing from micro-finance groups on other household members, their power to make social and political decisions and the overall empowerment (represents the ability of the person to make economic, social and political decisions) were reflected in these studies. The recent studies were more on the sustainability of the programme. Thus the focus was on the financial sustainability with the amount of loan disbursement, cost structure, loan recovery rate; cost of funds etc. The following are some of the studies on micro-finance programmes focusing mainly on the impact and sustainability of the programme.

Several economists and sociologists have addressed the issue of impact of micro-finance programmes on women empowerment. These studies have indicated that participation in micro-finance activities has enabled members a social, political and economic empowerment.

Osmani (1998) has studied the relative well being of women in the household in terms of the degree of autonomy within the household, ability to take decisions and relative access to household resources.

Whereas Hashemi et al (1996) studied the implications of rural credit programmes in terms of mobility, economic security, ability to make purchases, involvement in major household decision making, relative freedom within the family, political and legal awareness and involvement in political campaigning and protests. Thus these studies have a general conclusion that increased access to credit improved their social mobility, self worth, voice in household decision making, access to assets and education.

Ahmed et al (2001) have analyzed the emotional well being of rural women resulting from micro credit programmes and looked into the psychological stress of the poor women in times of repayment.

Rajasekhar's (2000, 2001, and 2002) studies were on empowerment, poverty alleviation and sustainability of micro-finance programmes in the Indian scenario. These studies express the caution that positive impact of the programme on poverty alleviation and empowerment may not be associated with all the types of groups. The micro-finance programmes organised and extended by SHGs were successful in the promotion of income generation activities and many of these groups act as a forum for women to discuss on savings and credit activities and social issues.

A study by Kaladhar (1998) emphasised that the benefit of the programme should be at least as great as the cost of lost working time of households to participate in micro credit programme. He stated that micro credit programmes are not relevant for the poorest and the most illiterate, because of their poor ability to bear risks. So these programmes are helpful for those women in rural areas who cannot be wage employed outside home or for those who do not have the ability to join formal labour market.

By taking a study into the heterogeneous nature of the poor people in Bangladesh, Evans (1999) states that the poorest were not able to collectively participate in many programmes due to lack of continuous supply of credit from the programmes, lack of registration fees, high opportunity cost of lost working time, lack of awareness of the group action rather than individual action. The same idea was supported by Satish (2001) in the Indian circumstances. He argued that the poorest were hesitant to participate in many programmes since they were not confident about their capacity to save.

Several studies have analysed the importance of group lending activities in different countries. The importance of the group lending in reducing transaction costs and administrative costs and

the impact and patterns of selection, monitoring and repayment in collective action are discussed. Bhatt and Tang (1998) discussed about three lending arrangements such as group lending with joint liability, individual lending with group liability and individual lending with individual liability. They argued that group lending can reduce transaction costs and can work well in homogeneous groups with high repayment capacity. Sharma and Zeller (1997) analysed the repayment performance of three Bangladesh based credit agencies. High repayment was ensured through credit based on joint liability, no further loan without repayment, lending followed by training and also through the provision of emergency fund where these agencies had performed better than government sponsored commercial banks.

Group lending idea was again supported by Seibel and Parhusip (1998) in their study on outreach and sustainability of micro-finance institutions in Indonesia. These programmes had improved outreach in terms of number of savers where more than 94 percent of the profit was from individual lending. Bratton (1986), in a comparative study of the individual and group lending credit schemes in Zimbabwe, Africa found that the group lending was not effective in times of severe drought, since chances of default are very high. He also probed to analyse how group repayment rates can fluctuate according to changing external circumstances. The author states that the key organizational factors making voluntary repayment are cohesive groups, strong community leadership and firm but flexible staff supervision. He confirms that either a selective incentive or coercive sanction is required to enforce joint liability and maintain group formation. The above studies have brought out the importance of group lending over and above the individual lending arrangements and state that groups through social capital can exert pressure among the members in times of selection, monitoring and repayment. They also highlight the role of incentives and mechanisms for collection action.

A few Indian studies were carried out on the importance of social collateral in group lending activities and the incentives and mechanisms behind the success of these Programmes. Datta and Raman (2001) empirically studied the heterogeneity and social cohesion existing in the SHGs of Andhra Pradesh. This study pointed out that social ties among the members assured timely repayment and avoided adverse selection and misutilisation of funds by borrowers. Moreover, dynamic incentives built into the groups ensured a high repayment, because further loans are made available only to those groups, which repay within a stipulated period of time. Rajasekhar (1996) provided the same argument and stated that even in heterogeneous and large groups; SHGs can perform very well through credit linked to savings and innovative collateral arrangements.

Another study by Llanto (1990) examines the lack of access to bank credit by the rural people within the framework of asymmetry of information and tells that interlinking transactions between banks and various rural based organisations like farmers associations and SHGs can ensure a convenient supply of credit.

A study on the performance of Grameen Bank of Bangladesh (Jain, 1996) found that the success of the programme depends on having a sustainable policy mix not only for the programme target group, but also for the development organisations own functionaries. Therefore, the combinations of strategic credit policies and credit induced culture among the employees and clients made the programme sustainable. A critical study on the effectiveness of the objectives of SHGs of Bangladesh by Sinha and Matin (1998) revealed that in spite of the increased outreach, micro-finance credit had been unable to substitute informal sector. It is because of the increased consumption and loan repayment purposes that people are depending on micro-finance institutions, but urgency to repay pressurises them to borrow from informal sources. A comparative analyses of the working of state led micro credit programmes in India with that of the nine NGO led micro

credit programmes by Chavan and Ramakumar (2002) reveal that NGO led micro credit programmes were successful in ensuring selection, monitoring and repayment performance. A high repayment could not be considered as a success of the programme, because the pressure within the group may force the members to borrow from informal sources. Thus these studies have shown that in spite of the increased outreach, the programmes were not able to satisfy the rural financial requirements. For overall sustainability of the programme, necessary attention should be given to selection, monitoring and repayment.

Some Indian studies analysed the performance and the approaches of credit programme in India. Parthasarathy and Kalyani (1995) studied the economic impact of women's thrift and credit societies in Cudappah district of Andhra Pradesh. The study was focused on the economic impact of the thrift societies to study access to credit, cost of credit, savings, production and quality of life. These credit associations can serve the interest of the people as they are playing an important role in poverty alleviation in rural areas on democratic lines. A study by Dadhich (2001) was on the evaluation of the performance of Oriental Bank Group Project (OBGP) SHG linkage programme. The SHGs were homogeneous in gender, economic status, religion and social background. The programmes had reduced the borrowers transaction costs compared to the bank loans under subsidized programme sponsored by the government. The study argued that those women who had taken subsidiary occupations improved their incomes, which resulted in their economic and social empowerment. Repayment pattern of the people was as high as cent percent because of the positive incentive for higher loans in future.

Kaladhar (1997) studied the design, structure and governance of micro-finance in India. It revealed that the outreach of the programmes have been increasing over the years through the help and assistance from SEWA, NGOs, IRDP programmes, cooperative banks and commercial banks. Banking sector reforms have tried to remove some of the imperfections, which were dealt in detail by institutional economics.

Rural credit markets are “inherently imperfect in the sense that there is no certainty about the completion of a credit transaction. A credit transaction involves a relationship between a lender and a borrower in time and hence, in the context of uncertainty. A credit transaction is complete only when the borrower repays the amount borrowed; and there is no certainty about this repayment” (Bhatt, 1987; M-45). There are, therefore, many imperfections in credit markets, notably in rural credit markets of developing countries. Interest rates charged by moneylenders may be high. At the same time, it is difficult to obtain credit at any price. Further, despite the option of cheap credit from banks, rural people continued to borrow from moneylenders at high interest rates (Rajasekhar and Vyasulu, 1990).

The major factor contributing to imperfections in rural credit markets is imperfect information on risks and costs involved in credit transactions. In order to ensure timely repayment the bank should screen, motivate and enforce them (Stiglitz and Hoff, 1990). Thus the cost incurred in the above three to reduce uncertainty in the credit market or to increase transparency in the credit market can be termed as transaction costs. Risks can be reduced with better and more accurate information; but this would involve increased transaction costs to lender and/or borrower. Hence, a reduction in risk, resulting from a financial innovation, should be greater than increased transaction costs of borrowing and lending.

Financial intermediation through a group of borrowers is one of the first types of credit innovation (Bhatt, 1987). In the group based lending programme, individuals form into a group to qualify for credit. The credit fund, which usually comes from an outside source, is disbursed to individual members according to agreed criteria and the group undertakes joint liability for debts of

each member. In micro-finance groups, there are three types of lending arrangements, based on who bears the liability. They are group loan with joint liability, individual loan with group liability and individual loan with individual liability (Bhatt and Tang, 1998; Bratton, 1986). Joint liability is supposed to enhance the repayment ratios compared to bilateral loan arrangements (Reinke, 1998). In the first type of arrangement, the loan is made to the entire group or to several members at the same time and all the other members is jointly liable for repayment. In the second case, loan is provided to individuals in the group, but the group is jointly liable for repayment. In the third type, the function of the group is mainly to provide information to the lending agency and to support other group members, but individual is liable for repayment of the loan. In all the cases described above, the joint liability provides incentives or compels the group to undertake burden of selection, monitoring and enforcement that would otherwise fall on the lender (Hoff and Stiglitz, 1990; 249).

Micro-finance has turned out to be an effective strategy for formal financing agencies. Group lending minimises transaction cost and at the same time the members of a group can avail small loans through the group. The chances of misutilisation are minimal and there are assured repayment because of peer monitoring by the group. The group concept has enabled the rural poor to develop the savings habit and minimize extravagance. In India, micro-finance is delivered through Self-Help Groups (SHGs). The concept of SHG is wider, and is not the same as the micro-finance group. The members borrow from their savings fund for both consumption and production. Since the revolving credit fund is built with the help of savings of individual members, all the members take interest in the selection, monitoring and repayment. After some time, since the revolving credit fund based entirely on savings of members is normally insufficient to borrow for income generating activities, the group applies for external assistance. In the context of micro-finance, a SHG consists of 10-15 members (men or women - though in most of the cases in India, women happen to be members), who periodically contribute a fixed amount of savings. In most of the cases, the formation of SHGs has been facilitated by NGOs.

It has also been mentioned that, among different types of micro-finance programmes, no single arrangement is superior to the other. The performance and viability of a particular form of group lending depends to a great extent on the social context of the region where the programme is implemented. When social capital (it refers to the institutions, relationships and norms that shape the quality and quantity of a society's social interactions) is very high, lenders are willing to shift responsibilities and transaction burdens on to the group, knowing that trust and information availability will help to internalise transaction costs (Mayoux, 2001). Therefore the first arrangement (i.e., group lending with group liability) requires most of the transaction cost to be borne by the group, whereas it is much lower in the case of third arrangement. Only those group-lending programmes that economise transaction costs for both the lenders and borrowers have a chance of being viable (Bhatt and Tang, 1998).

The micro-finance groups are also likely to face the problems relating to the selection both selection into the group and selection of borrowers. It has been seen among the members and non-members of micro-finance groups that the poorest are not in a position to get membership because the membership requires the participants to pay for registration and to attend regular meetings (Evans et.al., 1999 and Hulme and Mosley 1996). The members should have some kind of liquidity to repay the amount, since the amount has to be repaid in various installments soon after taking loan from the bank. They are not in a position to make initial payments and similarly, the opportunity costs of lost working time are higher for them.

Thus, for a micro-finance group to be successful in collective action, the composition of the group needs to be looked into. If the group members themselves are heterogeneous (Evans, et.al, 1999), it may be possible to make a classification of them into economically developing poor and totally deprived poor. Lack of awareness and social cohesion, problems in loan appraisal and follow up and financial stringency among the poorest have been noted to hinder them from accessing credit (Mahadheshwaran and Dharmadhikari, 2001). Therefore compared to the poorest, the developing poor are in a better position to make use of the credit facilities. Thus, the participation of the poor in a heterogeneous group and among the different types of groups in the credit activities and their strength of collective participation to reduce transaction costs, need to be studied.

The mechanisms like homogeneity and group size are used in collective action among the members. According to the homogeneity principle individuals within the SHGs should be homogeneous in terms of selection, monitoring and repayment. But a group with homogeneous features in all respects may not be appreciable. While allocating the lending portfolio, there may be temptation to diversify loan amount among various heterogeneous activities to reduce the concentration of risk.

The group size is supposed to be as small as possible to reduce the chance of free rider problem, and to relate the individual interest with the group interest. But a large group can reduce the administrative cost of lending large number of small loans. Hence, it is likely to come across all the groups, which are small. It needs to be seen how the collective action takes place among large sized groups.

A credit transaction is said to have been complete only when the amount borrowed is repaid. Therefore the incentives-positive and negative for the repayment of the loan are normally provided. The chance of getting a next loan or a bigger loan by the same borrower depends upon his timely repayment. Similarly, the social coordination among the members may force the risky borrowers to repay, since the chance of getting loan by the other members of his group depends on the repayment performance of this particular borrower.

Some of the studies undertaken by NABARD officials have focused on various aspects of SHG-Bank linkage programme with reference to bank and SHG members. These studies provide some glimpses of the trends of formation of SHGs, their linkage with Banks for credit and the consequent socio-economic impact on the rural poor.

"Micro finance for Rural People - An Impact Evaluation Study" by v. Puhazhendi and KJS Satyasai conducted for the country as a whole covering 11 states in five different regions finds that SHG Bank linkage programme has significantly contributed to the improvement in savings, improvements in assets, improvement in income levels and social conditions.

"Task Force on Supportive Policy and Regulatory Framework for Micro Finance" headed by Y.C. Nanda, Managing Director NABARD observes that, micro finance is a useful tool in building the capacities of the poor in management of sustainable self-employment activities besides providing them other financial services like savings, housing and consumption credit. Further, the National Policy for micro finance envisioned by the Task Force seeks to achieve the following mission "Five years hence, we are looking for a process chain leading to empowerment of 75 lakh poor house holds, and more particularly of the women from these households through strong and viable people structures like SHGs which draw strength and support from the banking system with the message that banking with the poor is a profitable business opportunity for both the poor and the banks"

Mr. S.M. Sheokand in his paper "Reorienting Banking with the poor - the SHG Bank Linkage way" has analysed the SHG-Bank Linkage approach. He observes a Win-Win situation for both the Banks and the SHGs. Further he observes that given the size of the country and incidence of poverty in India the progress under the linkage programme can be considered as a modest. There is also a regional concentration of progress in southern India.

"An Evaluation Study of Self-Help Groups in Tamilnadu" by Dr. V. Puhazendhi, describes the significant impact of SHGs on social empowerment, empowerment of women, employment generation, credit absorption, new income generating activities, savings pattern etc.,

Research Gap

From the above discussion, it is evident that SHGs are aimed at reaching the benefits of 'Self-Help' with 'Mutual-Help' to a large number of poor. 'Through the mechanism of SHGs the poor members begin to understand the nuances of commercial operations and also imbibe financial discipline in their lives.

Most of the SHGs are formed of women members who are traditionally better savers, better managers of fugal resources and better homemakers. Linking SHGs by finance, the banks will be able to reach a large number of poor families without putting strain on their physical or manpower infrastructure. SHGs have thus made positive impact on socio-economic conditions of the rural people. Therefore the economic impact of the SHGs in the development of rural economy is needed to be examined.

The available literature suggests that the focus of the existing studies was more to the impact and sustainability of the micro-finance programmes. The studies indirectly state that social, capital or joint responsibility among the group lending programmes can ensure a high repayment. However, studies have not touched the comparative study of two different programmes with the same objective in a district. Thus there exists a research gap on the issue of formation, cost effectiveness and their performance.

Profile of Both SHG's

1. Stree shakthi

The Government of Karnataka implemented various schemes for the social, economic and overall development of the rural women. But these schemes do not appear effective in enhancing the confidence and capability of the women under present conditions. The Government has taken up the work of women development with the joint collaboration of various departments with an aim to achieve the overall development of women. For the implementation of these schemes, financial support has been extended in the form of subsidy through different projects directly or through banks to eradicate poverty of the women. With a view to make the women financially independent, the state government has established the State Women Development Corporation. Many projects are being implemented for the financial progress and self-independence of the women. But the results shows that, it is not possible to achieve the social, economic and all round development of women only by treating them as the beneficiaries of the government projects and giving them subsidy or loan. Instead of that, awareness should be created among the women regarding the status and position they are entitled to in the society and they must be made financially, socially and politically fit and capable.

This programme is based on the successful attempts of the neighbouring countries like Bangladesh and Philippines, and some states in our country. This programme has been implemented

during 2000 by then Chief Minister S.M.Krishna through the department of women and child development. Women are encouraged to form self help groups under Stree Shakthi with the active involvement of NGO's for the all round development of Women. The main aim of "Stree Shakthi" was to make the rural women self- dependent through organizing twenty lakh women into one lakh self help groups.

The State government has taken a revolutionary step by setting this project attempting to invest 72 crores of rupees at a time in the projects taken up for the development of the women and organizing women in such huge number.

The launch of Stree-Shakthi was justified on the grounds that although the women development programs were being implemented in the state since 1978 and both government and non-government agencies have made considerable efforts, the desired results could not be achieved (GOK 2002). The main objectives of the program are:

to strengthen the processes that promote economic development of women and create an environment for social change:

to form one hundred thousand SHGs during 2000-2001 based on thrift and credit which builds self-reliance and provide them greater access to and control over resources:

Creating self-confidence and self-reliance in rural women through indulging them in income generating activities, thereby contributing to poverty alleviation and

Providing opportunities to the group members to avail the benefits of other departmental schemes by converging the services of various departments and lending institutions to ensure women's access to credit financing.

The administrative sanction to the program was accorded through a government order in August 2000, and since then the program is being implemented in all the 175 blocks in the state to organise 1.5-2.0 million \women in one hundred thousand SHGs.

Scope of the Project

The implementation of this scheme covers the villages spreading in 175 Taluks in the state. About 20 lakh women will be organized through one lakh self help groups. Since Swarna Jayanthi Urban Rojgar Yojana is being carried out in the urban areas they are excluded from this scheme.

Outlines of the Scheme:

Self- help groups are formed through the Anganawadi workers in the rural areas of each Taluk. About 15 to 20 lakh women will be organized under this scheme consisting of 15 to 20 women in each group and one lakh self help groups will be formed throughout 27 districts in the state. In the first stage 50,000 self-help groups are formed and the remaining 50,000 groups are initiated in the preceding years.

Stree Shakthi group is a group where 15 to 20 like-minded women coming from lower strata of the society having similar social and financial background with a feeling of oneness organise themselves voluntarily into a group for their financial development

This group creates self-help among the members by codifying the rules essential for the all round development of the members as well as the village. The group having 15 to 20 members must adhere to the rules and regulation framed by them with mutual faith, common interest and self-awareness. The main features of such groups are regular savings, lending money on the principles of self-help initiating common fund, finding redressal to their problems through Unanimous decisions thereby achieving development. It is left to the decision of the whole group to decide the rate of interest to be levied on the loan given to the members of the group. The leader-

ship will be decentralized. Various records have to be maintained in the group and a savings account in the joint name has to be opened in any bank

While joining the self- help group the admission application of the member should be filled up and each member must possess 'personal savings and loan book. During weekly meeting the minutes of the meeting should be entered in the 'minutes book'. As regards the savings and loan transactions each group should maintain 'savings account book', 'receipt book', 'payment receipt book', 'cash credit and debit book', 'loan format book', 'loan account book' and all these registers have to be maintained properly. If the members/ representatives are not able to maintain the records a person may be appointed for this purpose.

2. Swa-shakthi - The Rural Women's Development and Empowerment Project (RWDEP)

The project, which was formally launched in 1999, is being implemented by the WDCs. The rationale for the Project relates to male female inequities in the household, occupational, social and political spheres (World Bank 1997: 1-2).

Swa-Shakthi aims at strengthening the processes that promote rural women's economic development, and creating an enabling environment for their social change. The specific objectives are as follows:

Institutional capacity building for women's development by the establishment of SHGs and sensitization and capacity building of all project affiliates (SHGs, NGOs, and Line Departments. etc.)

Establishment of support mechanisms for women managed income generation activities (IGAs). This includes enabling the groups to mobilize investment funds from banks and provision of business management and technical assistance to SHG members.

Establishment of mechanisms to access social programs and leverage funds for community asset creation.

Savings and credit are the two mantras of SHG's. As it represents a practical demonstration of the philosophy of self-help and self-reliance which underpins SHG's. It requires the active participation and commitment of the women. It provides a concrete activity through providing them with an opportunity to exercise, control and participation in decision making, often for the first time in their lives. It also satisfies a short-term practical need of women for a safe place to save and provides a facility to meet women's initial needs for crisis credit and removes them from the exploitation at the hands of the local moneylenders. Emphasis is placed on regular savings from essentials to meet from surplus in order to encourage the thrift habit, which contributes to savings and later to investment if opportunities exist, is a major factor in generating and sustaining an individuals desire for progress. Thus both the SHG's provide advances to women groups who aim to empower women and raise their status in their families as well as in the wider communities.

Table: 2.SHG's in Kolar District

SHG's	Number
1. Stree Shakthi	50
2. Swa Shakti	50
Total	100

Source: Field Survey

Educational Level

The social aspect of human life is maintained and transmitted by education. Education can be related to all spheres of economic activities such as consumption, investment, employment, human resource development etc. The educated women can wisely plan for their future and involve themselves in productive activities. They usually avoid unnecessary expenditure; education creates better understanding and increases the efficiency. It would also develop initiatives and interest of women to learn various skills in empowering themselves. To find out the level of education in both the self help groups, a table is prepared. The sample women entrepreneurs are divided into six groups namely illiterate, up to primary school, up to middle school, S.S.L.C, P.U.C. and degree. It could be noted that illiterates form 42 percent. On the whole more than 58 percent of the members in both the SHG’s are literates. The level of high school education is more prominent in both the SHG’s where as the degree holders who involved in SHG’s are very less according to the field survey.

Table: 3 Education level

Level of Education	Stree Shakthi	Swa Shakthi	Total
Illiterate	23(46)	19(38)	42
Up to Primary School	5(10)	10(20)	15
Up to Middle School	4(8)	5(10)	9
S.S.L.C.	15(30)	12(24)	27
P.U.C.	2(4)	2(4)	4
Degree	1(2)	2(4)	3
Total	50(100)	50(100)	100

Source: Field Survey.

Table: 4 Members perception on joining SHG’s

Reasons	Stree Shakthi	Swashakthi	Total
For getting loan	10(20)	13(26)	23
For promoting Saving habit	15(30)	10(20)	25
For availing loan and promoting saving habit	20(40)	18(36)	38
For family welfare	3(6)	8(16)	11
Others	2(4)	1(2)	3
Total	50(100)	50(100)	100

Source: Field Survey.

During the field survey, information on the factors that motivated the members to join the group was collected. The above table shows the reasons given by members for joining SHG’s. About 40 percent in stree shakthi and 36 percent in swa shakthi opined that they joined the groups for promoting savings and for getting loans. Whereas 23 percent of members in both the SHG’s joined the groups for getting loans and 25 percent of members joined the groups for promoting saving habit, 11 percent of the members joined SHG’s for the welfare of the family and the remaining 3 percent for other reason.

The other reasons are Peer pressure, motivated by officials and NGO’s, Solidarity, exchange of ideas and experiences, to attend adult education classes etc.

This table explains the socio economic background of the respondents. The variables explained here are namely caste, size of the family, average income of the family per annum and marital status. Conceptually SHG’s are targeted to weaker sections. It would be interesting to look at the social status of the selected respondents. In general SC/ST’s families constitute the most vulnerable and economically the most backward among the different communities. SC/ST respondents are comparatively high in both the SHG’s. The beneficiaries among the total respondents, SC’s and ST’s forms 49 percent. BC’s form 38 percent and FC’s form 13 percent.

Size of the family always have a bearing on the economic status of the rural people. Among the selected respondents a family size between 6 to 10 members are more in both the SHG's (66 percent in stree shakthi and 46 percent in swa shakthi).

Table:5.Socio-economic Background of the Respondents:

Particulars	Stree Shakthi N=50	Swa Shakthi N=50	Total N=100
1) Caste			
a) SC's/ST's	27(54.1%)	22(44%)	49
b) BC	20(40%)	18(36%)	38
c) FC's	3(6%)	10(20%)	13
	50(100%)	50(100%)	100
2) Size of the family			
a) 2-5	6(12%)	19(38%)	25
b) 6-10	33(66%)	23(46%)	56
c) 11-15	11(22%)	8(16%)	19
	50(100%)	50(100%)	100
3) Average income of the Family per annum			
a) Less than 10000			
b) 10000 – 15000	6(12%)	4(8%)	10
c) 15000-25000	20(40%)	15(30%)	35
	24(48%)	31(62%)	55
	50(100%)	50(100%)	100
4)Marital status			
a) Married	39(78%)	40(80%)	79
b) Unmarried	7(14%)	5(10%)	12
c) Widowed	4(8%)	5(10%)	9
	50(100%)	50(100%)	100

Source: Field Survey.

Average income of the family per annum is an indicator of the quality of life. The level of income between 15000 to 25000 in both the SHG's are 55 percent and less than 10000 are only 10 percent. This clearly indicates the increase in the income levels of rural people can have better life than earlier.

Marital status is an important factor in taking decisions. 79 percent of the respondents in both the SHG's (78 percent in stree shakthi and 80 percent in swa shakthi) are married, unmarried women constitutes only 12 percent of the respondents and widows are 9 percent.

Table:6 Working of SHG's

Particulars	Stree Shakthi	Swashakthi
Meetings / month	3-4	3-4
Savings/month/member (Rs.)	75-100	50-150
Rate of interest (%)	24-30	22-36
Repayment	98.5%	97%
Having linkage with banks	8	6

Source: Field study

Regular meetings, compulsory attendance, and savings are the features of the SHG's. These meetings are conducted at the Anganawadi or the panchayat office, or sometimes at the group leader's house either weekly, or fort nightly, or thrice a month depending on the convenience of members. Agenda items include savings, flow of credit, income generating activity, recovery, social issues etc.

A fruitful discussion paves the way for better thinking and brings ideas for the mutual benefit of the members. There will be 3-4 meetings every month in both the SHG's. Depending upon the economic status of the group, women saved Rs.75-100 in Stree shakthi and Rs.50-150 in Swa shakthi usually savings are used for internal lending. The amount of loan and number of loanees are decided by the members depending on the savings, need and urgency loans are sanctioned at

24-30 percent of interest in Stree shakthi groups and 22-36 percent of interest in Swa shakthi groups, generally for a period ranging between 4-12 months. Women not only have access to credit, but control over an amount which they had never dreamt in their lives they would ever see. They opened bank accounts in the name of the group to ensure safety of money saved and to access more main stream credit.

Table: 7 Purpose wise utilization of loans taken from SHG's

Purpose	Stree Shakthi	Swa shakthi	Total
Income generating activity	33	37	70
Consumption credit	4	9	13
Social functions	6	2	8
Repaying old debts	7	2	9
Total	50(100)	50(100)	100

Source: Field Survey.

Purpose wise utilization of loans taken from SHG's are provided in the table. 'Credit for income generating activities' is the major purpose in the study area as per the respondents view. Consumption credit is in the second place and next comes and a percent utilize the loan amount for repaying old debts and the remaining 8 percent spent it on social functions. Major amount of borrowing is going towards income generating activity is a good sign of empowerment of rural women.

Income Generating Activities:

Both the programmes are attaining various income-generating activities through NGO's and other departments. Awareness is creating among the women to make use of the available services in various departments. Information has been given to the groups. Loans will be given to SHG's through financial institutions. Literacy programme for uneducated women members of SHG's will be provided through adult education programme. Apart from these opportunities higher education is provided through IGNOU. The activities which helpful to women in the development of various departments such as agriculture, horticulture, sericulture, industry, Rural development etc will be made available. Importance is given to education, to improve health and nutrition aspects of women.

Both the programmes are helping the needy people in number of income generating activities:

- 1) Petty business activities such as milk merchants, petty shops, vegetable venders, banana leaf cutting, cloth merchants, tiffin centres, bangle shops etc.
- 2) Processing units are masala powder preparing and selling, papad making, pickle making, chutney powder, spices, preparing garlands etc.
- 3) Production units are mat making, embroidery, knitting, fashion designing, banana fibre weaving, paper bags, toys making, agarbathi making, brick manufacturing, beedi rolling, weaving sarees, candle making etc.
- 4) Service units are tailoring, running restaurants etc.
- 5) Allied activities of agriculture are piggery, rearing giliraj chics, ginger growing sheep rearing etc.

Apart from these income generating activities they involved themselves in number of community developmental activities such as maintaining cleanliness of the villages, repair or roads, Construction of 'Gokatta', repair works of temples, strengthening the Anganawadi centres by donations in kind, cooking food for 'Akshara Dasoha' (for the successful implementation of another government programme) adopting steps to protect environment, closing Arrack shops etc.

By performing these activities SHG's can attain the heights of development with success of SHG's not only women are empowered the whole village will be empowered.

Table.5.8. Distribution of the respondents by the nature of activity

Nature of activity	Stree Shakthi	Swa Shakthi	Total
Petty Business activity	18(36)	16(32)	34
Processing units	4(8)	6(12)	10
Production units	4(8)	6(12)	10
Service units	8(16)	9(18)	17
Allied activities	10(20)	9(18)	19
Other activities	6(12)	4(8)	10
Total	50(100)	50(100)	100

Source: Field Survey.

The table brings out the distribution of respondents by the nature of activity. 34 percent belongs to petty business activity, the remaining are distributed among processing, production, service units, allied activities and other activities.

Findings

In order to understand the effective performance of the SHG's, a study has been conducted by selecting 50 respondents in each group. The interview schedule has been devised to collect data pertaining to the effectiveness of SHG's in the economic and social empowerment of women in the study area.

From the analysis it is found that the self-help groups are organized to manage their economic activities better and are gaining empowerment in directions, which are appropriate to their needs, interests and constraints. They gained confidence from an increase in their relative financial independence and security. The increase in the literacy skills of the SHG members is another indicator of empowerment. Some of them learned to sign, to read and write and could do simple arithmetic work.

Decision-making is the ultimate level of empowerment and equality. It signifies that women have started taking control of their lives and situation through attending group meetings, public functions, involvement in income generating activities, joining other women in social causes. The collective and integrated activities of the SHG's are presumed to have helped them in sustaining their family economically, giving better education their children, meeting financial crises in the family meeting any crisis independently. The SHG members are sensitized to acquiring an attitude to protest against various abuses, knowledge about their rights and other social issues.

Better communication skills are another indicator of empowerment of women. Most of the group members of SHG's (whom I have interviewed) are attending the group meetings and Gram Panchayat meetings (those who are selected as members) regularly. This develops their ability to interact and communicate with each other.

SHG's are empowered women by bringing them into the main stream of development and improving their economic status. SHG's offered new employment opportunities by way of income generation, self-employment and entrepreneurship to women from different socio-economic sectors.

People's participation in the development process is a major factor in determining the destiny of the people of rural area. SHG's are helping poor women by providing independent sources of income outside home and tends to reduce economic dependency of the women on husband and thus help enhance autonomy.

With the same independent sources of income together with their exposure to new sets of ideas, values and social support should make these women more assertive of their rights. By providing control over material resources, should raise women's prestige and status in the eyes of husbands and thereby promote intersperse consultation.

Some of the benefits of women's SHG's are :

1) Inculcation of spirit of self effort and self reliance among women. 2) enabling a form for women to exchange ideas and experiences 3) providing opportunities to women to encourage in productive work 4) fostering spirit of co-operation among women 5) promoting awareness 6) Providing opportunities to acquire skills 7) Providing confidence 8) SHG's supplement family income 9) helps women to become financially independent 10) helps to improve the status in the family and society 11) SHG's helps women to continue the traditional family occupation for income.

Thus these SHG's are successfully eradicating poverty of the downtrodden sections of rural women. These groups are helping out the rural women to participate in various programmes of the government without fear. Finally this movement is serving as an instrument of social change essentially out of empowerment of women. Improvement in the literary levels and children's education (particularly girls education), housing facilities, abolition of child labour, decline in family violence and banning of illicit distilleries in the villages. Women have acquired better communication skills and self-confidence; they have also acquired better status within their families and in public life.

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Marginalization of Himalayan Pastoralists and Exclusion from their Traditional Habitat: A Case Study of Van Gujjars in India

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Abstract: *The existence of Gujjar pastoral transhumance is one of the best examples of symbiotic relations of these pastoralists with the forests and sedentary population spread over in the migratory routes. The Muslim Van Gujjars are a pastoral group living in the foothills of the Uttarakhand Himalaya, are also known as buffalo grazers, follow transhumance between high altitude alpine meadows and forest foot hills without much diversification of subsistence strategy. The economy of Van Gujjars is completely based on milk production and supply of milk products along with the providing genetically well bred progenies of indigenous buffaloes to the hill people of Uttarakhand. With the declaration of new protected areas and National parks have led to their eviction from their traditional habitat of Rajaji National Park in the Shivalik foothills and Govind National Park in their traditional Bugyals (grasslands), indirectly forcing them to give up transhumance that has been their way of living since centuries. With increasing international emphasis on the conservation of biodiversity, policies need to be devised out for the Van Gujjars so that they are able to benefit from recognition of their role in conserving livestock genetic diversity, promoters of valuable indigenous breeds of buffalo and indigenous knowledge and also about coping mechanisms from environmental stresses.*

Keywords: Marginalization, Gujjar pastoral transhumance, Environmental stresses

Introduction

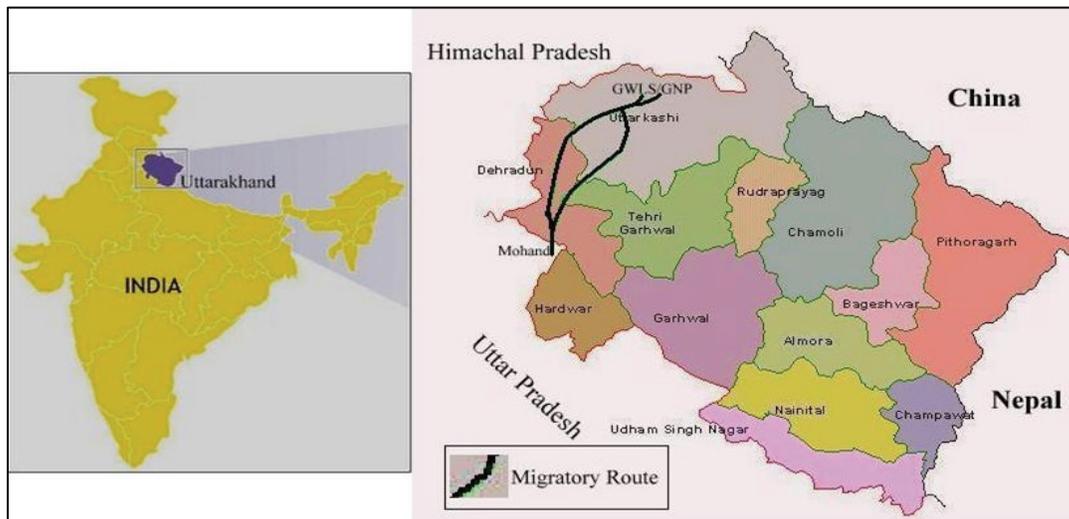
Van Gujjars are fully pastoralists following transhumance between two distinct eco zones without much diversification of subsistence strategy. The passageways between different subsistence strategies often encounter a regular thoroughfare. In Himalayas, comparable conflict developed as colonial governments appropriated forests from local communities to promote scientific forestry (Guha, 1990). Similarly, the creation of National parks and protected areas has led to the removal of local inhabitants and/or their exclusion from traditionally used natural resources (Maikhuri et al., 2001). The Van Gujjars families migrating to the Alpine pastures today face the same fate of being the 'victims of conservation'. It started in the forest of foothills at the beginning of the 1990s with Rajaji National Park, but during the last decade most of the summer pastureland in the upper ranges has also been converted into national parks, global heritage sites or sanctuaries. Apart from National parks, Van Gujjars elsewhere had the right to graze their animals in parts of the forest against a fixed grazing fee. But now some forests are being closed by the implementation of Joint Forest Management Programmes. The present paper addresses the various issues pertaining to marginalization and exclusion of Van Gujjars in the changing modern times.

Study Area

The winter camps of the Van Gujjars is in the Shivalik forest division which lies west of the Delhi - Dehradun highway and outside the Rajaji National Park, lying between 200 25'N and 300 25'N Latitude and 720 35'E to 780 15'E longitude. While the Rajaji National Park area lies in the east of the highway and includes Rajaji, Motichur and Chila lying between 290 50'N to

300 15'N latitude and 770 55'E to 780 30'E longitude. The summer pastures comprises of Govind National Park in Uttarkashi district covering an area of 472.08 sq.km was carved out from Govind Wildlife Sanctuary in 1990. The altitude of the park varies from 2056m to 6323m above msl. The alpine meadows occupy approximately one-fifth area of the park which is used as summer grazing land for more than 30 migratory shepherd groups.

Figure 1: Map showing migratory route of Van Gujjars from Siwalik foothill forest to Alpines



Methodology

The study is an account of long participatory field survey and data collection about different stakeholders of forests and pastoralism in Uttarakhand. The focus has been given on Garhwal region in particular. Questionnaire survey and interviews were carried out among the Van Gujjars inside Govind Wildlife Sanctuary and National Park and of Rajaji National Park. The secondary data regarding Wildlife Sanctuaries and National Parks were collected from Office of the Deputy Director of Govind National Park and State Forest Statistics of Uttarakhand Forest Department. Different acts regarding forest and conservation were analyzed relating to the present scenarios of pastoralism in the region. Pastoral migratory routes were mapped by taking part in the seasonal migration with pastoralists through different forests and alpine pastures.

Why Marginalized?

Marginalization owing to lack of legal social status

It is an established fact that Indian society is a plural society dominated by multi-ethnic, with a caste hierarchy, made up of groups interacting within local systems. The nomadic Gujjars are standing out from the Hindu caste system in a double way, partly as Muslims which makes them a part of a religious minority and partly as tribals which characterizes them as an ethnic minority, having a language, values and morals which differ from those of the surrounding people (Gooch, 1994). The *Van Gujjars* are further marginalized as they are not being treated in the same way by the administrators of State of Uttar Pradesh and Uttaranchal as of Himachal Pradesh and Jammu

and Kashmir. All the Gujjars of Himachal Pradesh are included in the list of Scheduled tribes. In Jammu and Kashmir, the Muslim Gujjars are also included in the list of Other Backward Classes. The Muslim Gujjars of Uttaranchal are not included in the list of Other backward classes. This implies that State governments of Jammu and Kashmir and Himachal Pradesh have owned up the responsibility of their Muslim Gujjar population, while the development of the nomadic Gujjars in Uttaranchal has been the sole responsibility of the forest department which has wanted to restrict the grazing of the Gujjars buffaloes in the forests of the area.

Marginalization owing to Political State boundaries

The marginalization of *VanGujjars* enhances with the creation of new state of Uttarakhand. In 2000, the hill districts of the large populous state of Uttar Pradesh were converted into a new state, creating one more border right through the winter camps of *Van Gujjars* in the Shivalik foothills. So a *Van Gujjar* residing in the foothills of Shivaliks of Uttar Pradesh need to migrate to the Alpine regions of Uttarakhand or Himachal Pradesh need to migrate through Uttarakhand where they are seen as intruders with no permanent State belonging. As gets evident in the case of *Van Gujjars* of Uttar Pradesh who were stopped from migrating to their summer pastures in Uttarkashi in the State of Uttarakhand. *Van Gujjars* have been specified as the only group who were full-time pastoralists and whose 'extensive migratory movements took them to fairly remote areas' and who 'possessed neither a permanent house nor cultivated land' (Chetan Singh, 1998). In the present state of political affairs, the *Van Gujjars* have continued life as nomads without a fixed address, still following the same routes from winter camps in the foothills to summer camps in the alpine meadows.

Marginalization owing to British policies

The marginalization of *Van Gujjars* started when the strict systems of control for pastoralists were introduced by the British government. These controls enforced that most flexible variables at the disposal of pastoralists in order to migrate were time for migration and routes and now these variables were to be decided by State officials rather than the herders themselves. The controls further emphasized on the restrictions on herd size with the limited number of animals they were allowed to keep despite being fully pastoralists. These rules left the *Van Gujjars* waiting every summer in the lowlands for the checkpoints to be established along the migratory routes and for official permission to proceed up into the hills. This further took away the right of migration at the right time from *Van Gujjars*, indirectly pushing them towards sedentarization.

Marginalization owing to lack of Civil Rights

The biggest factor that contributes to their marginalization is the lack of Civil Rights i.e. they have no access to domicile rights, policy advocacy, Lobbying and education. There is non existence of linkages between them and government services for education, health and veterinary support. The absence of these services marginalizes them further with fewer choices to alternate ways of securing a livelihood or subsistence strategies.

Why Exclusion?

Exclusion owing to Creation of National parks

The pastoralists became the 'victims of conservation' under different legislation. The Section 35 (7) of the Wildlife (Protection) Act prohibited total entry of livestock inside national parks

and provided very little space in sanctuaries with special permission from Chief Wildlife Warden i.e. the pastoralists had to live on the dictatorship of forest department (table1).

Table 1: Legal status of conserved area under forest department in Uttarakhand (2009)

Status	Sub-status	Area (km ²)	As percentage of total forest area	As percentage of total geographical area
Reserved Forest	National Park	4915.46	14.19	9.19
	Wildlife Sanctuary	2420.13	6.98	4.53
	Other	17307.34	49.95	32.36
	Total	24642.93	71.12	46.08
Protected Forest		9884.58	28.53	18.48

Source: Forest Statistics of Uttarakhand, 2009 and Office of the Dy. Director, Govind National Park.

The critical conflict between pastoralism and conservation in Uttarakhand started in early 1980s after establishment of two national parks in the vital summer grazing zones of pastoral livestock in Chamoli district in 1982 following Wildlife (Protection) Act, 1972. Creation of Rajaji National Park spreading over 820.42 km² in foothill forests of three districts (Dehradun, Haridwar and Pauri) in 1983 led to bring to an end of pastoral livelihood of *Van Gujjars*. According to government the sedentarization was needed for improvement of the forest dwelling *Van Gujjars* and conserving the wildlife diversity especially of Asiatic Elephant in the region. Some of the families have been settled by the government at two colonies of *Pathri* and *Gaindikhatta* near Haridwar. Plantation forests were cleared to create the Pathri colony at the cost Rs.3 crore. The colony consisted of 512 two roomed tenements-dark and dingy, with little ventilation. Surrounded by marshy lands near the Ganga on one side, a railway track and fields of the *zamindars*(landlords) on the other, living conditions at Pathri were unbearable. The Gujjars saw it as *Kaalapaani* (sentenced for life). The *Van Gujjar* population in the Rajaji National Park is given below (table 2):

Table 2: The *Van Gujjar* population in the Rajaji National Park (1985-1998)

Sl.No	Forest range	No. of families (1985)	No. of families (1998)
1.	Haridwar	85	254
2.	Chilla	181	193
3.	Motichur	37	116
4.	Kansrao	11	85
5.	Chillawali	65	260
6.	Dholkhand	116	234
7.	Ramgarh	17	99
8.	Gohri	-	149
	Total families that were to be rehabilitated	512	1390

Source: Joshi, 2009

The *Van Gujjar* families who shifted to the colony after 1994 have no land. Reserved forests around the colony were mostly plantations of *khair* and *Sheesham*, which allow little grass to grow. Weeds are widespread, and the acute shortage of fodder does not allow the Gujjars to rear

livestock at Pathri. The infertile land allotted for cultivation is not productive and the *Van Gujjars* also do not have technical knowhow to cultivate land. Most of them now work as laborer in nearby towns and villages to earn their livelihood.

Govind National Park in Uttarkashi district covering an area of 472.08 km² was carved out from Govind Wildlife Sanctuary in 1990. The altitude of the park varies from 2056 m to 6323 m above msl. A vast variety of rare and endangered plant and animal species are prevalent in the park. The alpine meadows occupy approximately one-fifth area of the park which is used as summer grazing land for more than 30 migratory shepherd groups. The tree line forests of the park have been grazed by the buffaloes of 13 *Van Gujjar* families having the official grazing permits ever since the official permits were allotted from Forest Department and not a single new permit was issued after that. The forest department started restricting the movement of *Van Gujjars* in the region after creation of the national park. The migrating *Van Gujjars* had to cope with the threat and forced bribery of the forest department and stay in foothill forests round the year and few resorted to partial sedentarization. The situation worsened after 2006. In summer 2010, there were only six *deras* inside the park area which used to be about 25 *deras* of extended families in the region till the early years of this decade. Ban on grazing in Govind National Park have created the park-people conflict once again in the State after the case of Nanda Devi National Park and Rajaji National Park. According to the forest department plan, the affected shepherds will be allowed to use the alpines of buffer zone in sanctuary but there is no such alternative plan for *Van Gujjars*. Again the forest department is also trying to ban the *Van Gujjars* who go to Pustara forests (not inside the core zone of the park but in same forest range). The most striking feature of this ban and eviction is that the *Van Gujjars* are not included in the government's plan for compensating their rights over the traditional grazing land. The migrating families were not issued the grazing permit and allowed to move only on humanitarian grounds. All the stakeholders dependent on the Park resources are displaced. And thus, the pastoral right of this forest dwelling community is denied in spite of the notification of Forest Rights Act, 2006

Exclusion due to Traditional view of conservation by forest authorities as being anti people

Van Gujjars have been asserted as the main culprits causing major forest destruction as gets evident from the various reports of the government. According to Gupta's Plan, (1949-1963), The lopping rules were not enforced ...As the allotment of areas changed from year to year, the *Gujjars* did not know the areas to which they would return next time and so felt no sense of responsibility and the damage continued unabated. *Van Gujjars* use of the trees includes lopping for fodder and use of dead wood for firewood and *dera* construction. As the reports suggest that *Van Gujjars* ignore all lopping regulations and lopping is viewed destructive to the forest. Heavy and concentrated lopping is resulting in trees drying and dying (Kumar, 1995). However, there are studies that compared two adjacent and similar sections of the forests of Siwaliks, one with moderate lopping and other with no lopping. The study found that the lopped area had more growing seedlings and fewer weeds (Edgaonkar, 1995).

Furthermore, *Van Gujjars* require wood as fuel for cooking and heating. The Park authorities state that a *Van Gujjar* family recklessly consumes on an average about one quintal(100Kgs) per day of fallen fuel in the lopping areas on the pretence of protecting their cattle from carnivores and their self protection from cold (Kumar,1995).while on the other hand Clark et al.(1986) give an approximate figure of around 40kgs per day of fuel wood consumption which is supported by an extensive study made by RLEK(RLEK,1997).The study emphasized on the fact that there is no shortage of dead wood within one hundred meters of *deras* and most common reason cited for

such availability of dead wood is owing to tree damage caused by elephants. Another use of the forest wood is for construction of *deras*. Here the *Van Gujjars* adapt to the situation by using only dead and fallen wood for *dera* poles without felling the trees and normally the construction of *dera* is after a span of four to five years. In fact, if *Van Gujjars* leave the *dera* empty through the summer migration, the wood of their respective *deras* of winter encampments are either stolen or sold by the forest authorities. As a consequence, *Van Gujjars* have increasingly adopted the strategy of leaving at least one family member behind to protect the *dera* from destruction, eventually leading to an enhanced sedentarization.

There is a constant pressure on *Van Gujjars* by the Park officials blaming them of increasing their animal and human population along with increasing grazing and biotic pressure in the park area. Furthermore, the increasing sedentarization of the *Van Gujjars* families is adding on to the pressure. Park authorities blame for the increased number of the *Van Gujjar's* population, yet they have not even doubled assuming 512 families in 1937 with 6 persons a family and approximately 5500 *Van Gujjars* today in the recent census. Although their birth rates have been high, so has infant mortality (RLEK, 1997). So the increase in *Van Gujjar's* population in regards to Human has been much lower than the substantial human population increase in overall Dehradun District.

Exclusion due to Negative attitude of villagers on the migratory routes

The *Van Gujjar* inhabiting the Shivaliks migrate to the pastures of Tons, Yamuna and Tehri forest division of Garhwal Himalaya as well as Choupal Rodu and Simla forest divisions of Himachal Pradesh. Besides, the herds pass through a number of villages through the middle altitudes where fodder and water are available. Earlier the movement was during the day and the herds were halted in agricultural fields where substantial quantities of dung were left when the herd moved. Thus the villagers got manure without any expenditure. There were other transactions also, such as the purchase of *pural* (fodder) by the *Gujjars* and occasional purchase of *jhotas* (male buffaloes) by the villagers for breeding purposes. The relationship between the *Gujjar* and the local population was cordial and the *Van Gujjars* were welcome in the vicinity of the villages. However, there has been some change in the attitude of the local population which is related to resource availability as well as reasons political. The *Van Gujjars* are no longer welcomed in the vicinity of villages although economic transactions are still carried through. The economic transactions are still based on the Barter system of villagers and *Van Gujjars* entering into economic transaction. The Table 3 shows the barter system prevalent in the alpiners between *Van Gujjars* and the villagers in approximate values based on observations.

Table 3: Barter system prevalent in the alpiners between Van Gujjars and the villagers

Gujjars gives	Value (market value)	Gujjars takes	Value (market value)
1litre milk	Rs.22	4 Kg potatoes	Rs.32 (8per kg)
1 Goat	Rs.3000	1 night field grazing	Rs.2000
1kg butter	Rs.200	25kg potatoes	Rs.200 (8per kg)
1 <i>Khais</i> (Woolen sheet)	Rs.450	1 <i>Goondh</i> (horse cover)	Rs.400
Total	Rs. 3632		Rs. 2692

The findings clearly show that the *Van Gujjars* loose out in economic terms from the barter system but since they live in such inaccessible areas that easy access to availability of things of utility plays an important role in their pursuance of barter system.

Van Gujjars still purchase fodder from villagers as most of the areas on their trail have been declared as protected areas. Today a *Van Gujjar* purchases a head load of 2quintals at a rate of Rs.800 which is consumed by 10-12 number of buffaloes in a day. Along with this, the villagers charge them for the halting spaces that they provide to *Van Gujjars* for camping of their buffaloes to graze on. Approximately, *Van Gujjars* pay Rs.2000 per night for halting and grazing at a villagers' field. These mounting expenses have compelled poor *Gujjars* to adapt to situation by making camps at secluded places away from villages, at times along the highway itself. The halting places are also merged together with a constant decrease in the number of halts (*paraos*) on the migratory routes. The mounting expenses and the hostile attitude of villagers have led to decrease in the lifestyle of transhumance.

Exclusion in lieu of Developmental activities

As the routes mentioned above are of long distances, on the way they halt at common lands of various villages. Earlier the migratory voyages were marked with a lot of open spaces and forests for *Van Gujjars* allowing them trail through predetermined sites through traditional set routes and fixed timetable. Various developmental activities like irrigation and hydropower stations, road building, mining etc have also adversely affected the forest cover. As per the State forest Department Report, during last two decades around 26,000 ha. Forest land has legally been transferred for various development schemes in Uttarakhand (table 3).

Table 3: Forest land diverted for non-forest purposes in Uttarakhand during 2000-2009

Sl No.	Projects	No. of projects	Area (km ²)
1	Road construction	1025	35.83
2	Drinking water projects	391	1.36
3	Irrigation	49	0.58
4	Transmission line	75	17.37
5	Hydro power	48	11.39
6	Mining	14	39.03
7	Other	481	35.67
Total		2083	141.23

Rapid urbanization is underway after the creation of state in 2000. Expansion and widening of roads in fragile hill ecosystem is another serious cause of environmental degradation. Blasting of explosives inside forest areas and felling of trees degrade grazing ecosystem of the region. Road construction through the forests used traditionally by *Van Gujjars* during migration is creating noise and problem in herd mobility. Increased traffic on roads has worried the herders. Presently they report loss of 4-5 kids or adult livestock during each migration due to the accident with running vehicles.

Exclusion owing to shrinkage of pastures

In the high-altitude too a conflict situation is creeping up. Earlier the agro-pastoralists in the high altitudes only raised goats and sheep which used to go to pastures at higher elevations

where heavy cattle like Buffaloes could not climb. Now they keep cattle which are grazed at the pastures of lower altitudes where *Van Gujjars* grazed their cattle consequently, the *Van Gujjars* are compelled to take their buffaloes to high pastures. The presence of Gujjar's herds in the higher *bugyals* creates a conflict situation with the highland shepherds who do not want the *Van Gujjars* to migrate to the *bugyals* as they fall within the jurisdiction of their villages and the presence of two types of animals in the *bugyals* results in competition for resources. Sheep do not touch the grass browsed by other cattle so have to be taken further up beyond the reach of buffaloes causing hardship for the shepherds. If shepherds have the backing of traditional rights as inhabitants of the region then *Van Gujjars* are equipped with the Official permits issued by the forest department along with a receipt of payment for the grazing in the areas. In the hill districts, the *Gujjars* have to compete for pasture with the hill peasants. The Buffaloes are heavy animals and they cannot climb up high enough to reach the rich grass pastures in the high altitudes. The buffaloes are restricted to stay in areas, already populated by sedentary peasants, the Rajput and Brahmin agriculturists mentioned creating strong friction over the limited resources. *Gujjars* feel that the forest officials are much more receptive to the demands of the local settled inhabitants than to those of the Gujjars. It is the buffaloes of the *Gujjars* alone which are being blamed for causing landslides and deforestation. It is also the buffaloes of the *Gujjars* alone which are to be regulated in the forest. The villagers feel that the nomads are intruding on their traditional rights in the commons, causing overgrazing of the forest range. All these factors further alienate the *Van Gujjars*.

Discussion

It is very surprising that the nomadic forest dwellers and tribal communities who inhabit the forests of Himalaya and traditionally used the seasonal pastures in a migratory grazing system since ages did not have any right on those lands. According to the provisions of the latest Act, 'The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006', under Section 4, "the forest rights recognized under this Act in critical wildlife habitats of National Parks and Sanctuaries may subsequently be modified or resettled, provided that no forest rights holders shall be resettled or have their rights in any manner affected for the purposes of creating inviolate areas for wildlife conservation". Therefore, forest rights are even possible within a 'critical wildlife habitat' unless the government and expert establish that the activity of the presence of people or their rights "is sufficient to cause irreversible damage and threaten the existence of said species and their habitat". The Govind National Park has been chosen under the Project Snow Leopard by MoEF and in that case if the area is proved as a critical wildlife habitat even then the government has to prepare a resettlement or alternative package and that has to be communicated with the affected forest dwellers (*Van Gujjars* in this case) that secure the livelihood of those individual or communities under the Act. It further says that "no member of a forest dwelling Scheduled Tribe or other traditional forest dweller shall be evicted or removed from forest land under his occupation till the recognition and verification procedure is complete". But contrary to this act the Govind National Park authority is not reissuing the permit and threatening the *Van Gujjars* from 2007. The Act has also specified the right over "seasonal use of landscape in the case of pastoral communities". This clause strengthens the claims of *Van Gujjars* and other tribal pastoral communities over their seasonal grazing lands both at summer and winter grazing lands. *Van Gujjars* have been paying grazing tax to the forest department for both places.

The most critical part of the act is that it requires documented proof of land use over a 75 year period in case of other forest dweller communities to claim any rights over any forest land. Proving the time period is a very tough task especially for the forest dweller. Official grazing permits have been the only legal document for the *Van Gujjars*. The grazing permits were given to very few families (not even to 10% of total community in some cases) and reissued the same in an irregular manner over the years. The forest department manipulated the clause by stopping to reissue the grazing permits of Govind National Park area from 2007, just after passing the Forest Right Act in 2006. Forest department does not want the pastoralists to migrate to this area and tries to break their link with the *Gram Sabha* (Local Village Councils) who has been given the authority to initiate the process for determining the nature and extent of individual or community forest rights. The *Van Gujjars* of Govind National Park area need to be made aware of the provisions made in the Act in order to claim for their rights in the region as the State Government may try not to form the *Gram Sabha* Forest Rights Committee (FRC) in the region as none of the four revenue villages (Dhatmeer, Gangar, Pawani and Osala) in the area has any population of Scheduled Tribe category. But it is very clear in the act that “no member of forest dwelling Scheduled Tribe or other traditional forest dweller shall be evicted or removed from forest land under his occupation till the recognition and verification procedure is complete”. The tough lifestyle of *Van Gujjars* does not always allow them the legacy of preserving all the old official papers of 75 years. The NGOs and social institutions (such as local village councils) have a great role to play in this case. They have to come forward in the areas where there is no tribal village (and no such village council to form FRC) but nomadic forest dwellers use the forests as seasonal grazing lands being isolated in the area. They also should produce the different literature and documents of long history of *Van Gujjars* in the forests and alpenes of Uttarakhand to the respective authorities. Gooch (2009) reported that the *Van Gujjars* have been migrating to the upper hills of Uttarakhand since British Raj and they were also harassed by the colonial rule during their migration in 1880s which indicates that the documented history of nomadic buffalo grazing in this region is at least 130 years old though the actual time span is far more than that.

According to the act, the *Van Gujjars* will now get their legal grazing rights also in their traditional foothill forest grazing zones. If the act is implemented fully the individual pastoralist will get right over maximum 4 ha forest land. The recognizing authorities have to be honest and identify all the nuclear families during the process. Due to its 'anti-pastoral' policies the forest department never issued new permits after the initial distribution of grazing permits. As a result in spite of proliferation of families, the number of permit remained same. This has created very bad situation particularly in case of *Van Gujjars*. One *Van Gujjar* family who was given that permit has now proliferated into more than seven nuclear families. Therefore, the administration has to be practical and identify all the nuclear families dependent on those limited official permits during the recognition of rights. The major dispute which was in case of the *Van Gujjars* of Rajaji National Park was that though the number of the families had increased, official grazing permit remained same since issuing those. No new permits or identity were given to the son or daughter of those initial permit holders. This might be repeated again in case of *Van Gujjars* of Govind National Park if they are resettled.

Conclusion

Sedentarization of forest dwelling *Van Gujjars* of Rajaji National Park has changed the social life and value of those people. Pastoralists have been turned into “crop cultivator” and laborers in

nearby towns. The creation of Govind National Park is forcing the nomadic *Van Gujjars* to sacrifice their traditional livelihood to make way for environmental conservation. State government has not offered any alternative summer grazing land for them. The most surprising incident is that the *Van Gujjars* are not in the compensation plan of government for their rights. The process of sedentarization of the nomadic pastoralists must be in a way that the rights of those people over their grazing land would not be overlooked. When allotting land for compensating the rights, the present number of family heads should be counted. Government should upgrade the traditional water mills (*Gharats*) in the region to produce electricity with at local level instead of constructing massive dams in ecologically fragile Himalayan ecosystem damaging the forests resources. The political barrier between neighboring states should be removed and cross-state grazing could be encouraged. There has been big political problem in allowing the pastoral herders into each other's boundary among Uttar Pradesh, Uttarakhand and Himachal Pradesh. This problem is largely faced by the nomadic *Van Gujjars* after creation of Uttarakhand state in 2000 from united province of Uttar Pradesh. As the eventual outcome of the paper, the need of the hour is inclusion of *Van Gujjars* in 'Socialized forestry where people are inherent part of the process of management, sustainability and conservation of Nature. Pastoralists are the best judges to ascertain the replenishment of depleting resources. *Van Gujjars* are inevitable for maintaining the Biodiversity in the alpine pastures through grazing and can best maintain the lower Shivaliks forest through plantation and conservation of local species of fodder trees. This informal scientific knowledge can be amalgamated with formal education system with special emphasis on the ethno veterinarian systems of livestock Herd management. Therefore, the impeccable strategy of constructing realistic development project with a maintained nomadic lifestyle, emphasizing on a life within the framework of 'normality' would be the ultimate sustainability measure for a sustainable development of nomadic people sharing symbiotic dependence on animals and nature.

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Remittances, Human Capital and Economic Performance in Nigeria

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Abstract: *This paper investigated the channels by which remittances impact on economic performance in Nigeria using the Ordinal Least Squares estimation technique. To test the time series characteristics and long run relationships of the variables included in the model, the paper employed the Ng and Perron (2001) modified unit root tests and Autoregressive Distributive lag (ARDL) bounds testing approach to co-integration developed by Peseran and Peseran (2001). The results showed that remittances affect economic performance in Nigeria through its interaction with human capital and technology diffusion. Government capital expenditure on economic and social services is equally important in accelerating the pace of economic growth and development. The findings of this study strongly suggest that for Nigeria to benefit from international transfers, policies should be fine-tuned to attract more remittances into the educational sector and technological transfers.*

Key Words: Remittances, human capital, co-integration and economic development

Introduction

The size of remittances inflow, the importance of human capital and technological diffusion in economic growth and development process of developing countries including Nigeria have triggered interesting debates among scholars and policy makers of international and development economics extraction. There are a number of reasons why the link between remittances, human capital, technological diffusion and economic growth and development would interest policy makers in Nigeria. In the past two decades, the Nigerian financial sector has undergone various types of reforms and is progressively gathering momentum in size and depth, not only to stabilize the financial sector but in readiness to absorb tremendous amount of domestic and foreign financial capital. The country has equally adopted varied policy measures aimed at exploring new initiatives to attract foreign direct investment in apparent realization that inflow of international transfers could be huge alternative sources of funding investment projects in various sectors of the Nigerian economy.

In addition, as observed by Orozco (2003), on the average about 65 per cent of total official remittances inflows to Sub-Saharan Africa (SSA) come to Nigeria. He equally estimated that about 2 per cent of global inflow of remittances comes to Nigeria. Agu (2009) study corroborated the observed increased inflow of remittances to Nigeria. He submitted that there has been tremendous inflow of remittances to Nigeria since the commencement of civil rule in 1999. For instance, from a negative growth rate of 17.9 per cent in 1999, remittances grew to about 186.2 per cent in 2005.

In 2007 remittances growth rate of 69.67 per cent stood only second to oil in terms of receipts. In addition, at nearly \$18 billion and \$20 billion dollars in 2007 and 2008, remittances inflow outpaced all forms of foreign inflows, except oil. In comparison to Foreign direct Investment (FDI) as a percentage of GDP, available statistics indicated that in 2006 remittances inflow stood at 7.5 per cent of GDP compared to FDI which was 3.5 per cent of GDP and Portfolio flows at less than 1 per cent of GDP.

In the literature there are conflicting contributions of remittances to economic growth in developing countries. Edwards and Ureta (2003) for instance argued that in El Salvador remittances improved recipients' standard of living. This is because income from remittances provided certain basic necessities of life such as food, clothing, education and shelter. It has also been argued

in the literature that remittances provide a substantial sources of foreign exchange earnings, which could be used to finance imports, and therefore useful in stabilizing balance of payments in some countries.

Opponents of the positive effects of remittances on economic growth and development argue that remittances have the potentials to fuel inflation in the recipient country. The channel they argue this happens is the tradable goods sector by appreciating the domestic currency, and that remittances rather than promoting hard work, encourages laziness, since households who receive remittances in most cases, elect not to work but to finance their consumption expenditure via foreign transfers (Chami et al 2003).

El-Sakka and McNabb (1999) in their study for Egypt discovered that imports financed through remittances have very high income elasticity, implying that remittances may have low multiplying effects. Their findings contrasted with the submission of Adelman and Taylor (1992), which employed the social accounting matrix to evaluate the direct and indirect changes in income stemming from remittances to Mexico. Their findings revealed that each dollar of remittances increased output by multiplier of 3 when successive rounds of indirect effect were taken into account.

Agu (2009) specified a four-sector medium scale macro model to investigate the relationship between remittances flows and the macro economy in Nigeria. He found a weak link between remittances and the real sector and components of aggregate demand. The possible reasons for this weak link between remittances and the real sector of the Nigerian economy, he argued, could be the existence of leakages of remittances proceeds through imports. Tomori and Adebisi (2007) and Chukwuone et al (2007) in their study of the effect of remittances on poverty levels argued that remittance is an important channel to alleviate poverty in developing countries. Whereas Tomori and Adebisi (2007) used partial equilibrium framework, Chukwuone et al (2007) employed living standard survey in their analysis.

Böhning (1975), Rempel and Lodbell (1978) argued against the positive effect of remittances on economic growth and development. In these studies, remittances are primarily used for consumption and housing expenditures. Chami et al. (2003) find a significant and negative growth effect of remittances. However, it has been argued in the literature that the estimate used in Chami et al (2003) is biased because of the instrumental variables used for remittances (Catrinescu, et al., 2006 and IMF, 2005). Rapoport and Docquier (2005) also argued that Chami et al. (2003) ignored the possibility that remittances could affect investment and human capital formation due to the existence of liquidity constraints, so that human capital, an important factor that affects growth, was absent in their analysis.

On the importance of the association between remittances and economic growth and development, Glytsos (2005) discovered that remittance spending differs across countries and that the negative effect of a decrease in remittances on growth is greater than the positive effect of an increase in remittances on economic growth and development in some countries, whereas in some countries the reverse is the case. Guiliano and Ruiz-Arranz (2006) found that remittances promote economic growth in countries with less developed financial systems since remittances finance investment and help to alleviate liquidity constraints. Catrinescu et al. (2006) submitted that remittances have a positive impact on growth, although weakly, and suggested that the existence of good institutions could provide the right environment to efficiently utilize remittances in productive activity.

The surveyed literature seems to suggest that there are certain complementary factors that may be required for remittances to have a positive impact on economic growth and development. The

complementary factors as argued in this paper include human capital and technology diffusion. The Endogenous growth theory supports the argument that human capital and technological diffusion promote economic growth and development. This, the theory argues, happens through their effect on total factor productivity (TFP). Romer (1990) models the growth of total factor productivity as a function of human capital employed in the research sector, and found that the stock of human capital in an economy is a determinant of the rate of economic growth. Nelson and Phelps (1966) argued that including education (human capital) as an additional input in an aggregate production function to represent the relationship between education and aggregate output may be a gross misspecification; they argued that education promotes adoption and implementation of new technologies and model the growth of technology as being affected by an interaction of human capital in a catching up setting.

Benhabib and Spiegel (1994) followed Nelson and Phelps (1966) and Romer (1990) and model TFP growth as a function of human capital and its interaction in a catch-up setting. They suggested that the growth rates may differ among countries because of differences in human capital stock levels. Thus, human capital enhances economic growth by affecting the growth of TFP both directly and through its interactions. Xu (2000) submitted that technology transfers from U.S. multinationals contributes to productivity growth in developed countries but not in developing countries, and that a certain threshold of human capital is required in the host country in order to benefit from the technology transfer spillover.

Other studies that found positive and significant effects of the interaction between human capital and international transfers on economic growth and development are Eller, Haiss and Steiner (2006) and Li and Liu (2005). Balasubramanyam, Salisu and Sapsford (1999) and Makki and Somwaru (2004) found a positive interaction though insignificant. Thus, the foreign transfers' literature shows how the level of human capital stock affects the absorptive capacity of an economy and consequently, the positive effects of capital inflows such as FDI and remittances on economic growth and development.

The objective of this paper is to investigate whether or not remittances affect economic performance in Nigeria through its interaction with human capital and technological diffusion. The paper adopted the NG and Perron (2001) modified unit root tests and Autoregressive Distributive Lag (ARDL) Bounds testing approach to co-integration to test for time series characteristics and long run relationships of variables included in the model. It uses time series data for Nigeria and investigated the effect of the interaction between remittances and human capital; remittances and technological diffusion and remittances on economic development. This approach, to the best of our knowledge has not been applied in remittance study in Nigeria.

Following the introduction, the rest of the paper is organized into four sections. Section two presents the theoretical underpinnings of the paper. In section three, the model and method of data analysis is presented. Presentation of results and discussions are done in section four and the paper concludes in section five with concluding remarks and recommendations.

Conceptual Issues

The conceptual framework that underpins the relationship between remittances, human capital, technological diffusion and economic growth and development can be explain within the Keynesians, the Mundell-Flemming model, Endogenous growth models, Neoclassical micro and macro theories. Keynesian model is the oldest attempt to model short run dynamic impact of international transfers on national output. The Keynesian model postulates that distortions or shocks to the economy on demand side have a disproportionate effect on national output. The

model assumes sticky prices, fixed exchange rate, interest rate and the absence of supply constraints. In addition, the theory argues that the magnitude of these shocks on national output would depend on the size of the transfer shocks.

Glytsos (2005) developed a Keynesian type macroeconomic model to estimate the demand generated by remittances on consumption, investment and imports. The model contained three behavioural equations namely consumption, investment and imports and an income identity equation. The model presents remittances as part of disposable income. He found a positive and significant relationship between income, consumption and imports. He incorporated the demand effect generated by remittances on consumption through disposable income.

Dornbush and Fisher (1994) argued that individual's consumption demands are related to their available income and not just to output level. Culum (1998) submitted that the acceleration principle implies that under a growing aggregate demand new investment are required, which promotes foreign direct investment and the expansion of new investment opportunities. And as reported by Taylor et al (2005) remittances contributed about 16 per cent of per capita rural incomes in Mexico in 2002. It can be argued that remittances increased the real income of the recipients and therefore stimulate aggregate demand in the economy.

The Mundell-Flemming model provides a good alternative to analyse the short run dynamics of international transfers on national output. The central thesis of this framework is that the effect of international transfers or remittances on national output would depend on the mobility of capital and whether or not an economy is operating a fixed or floating exchange rate regime. If for instance, capital is perfectly mobile, and the economy operates a pure flexible exchange rate regime, the money market would determine the equilibrium level of national output and output is not affected by international transfers. The Mundell-Flemming framework further argues that under the assumptions of perfect capital mobility and floating exchange rate regime, a rise in aggregate amount of remittances may increase national expenditure.

Under a fixed exchange rate regime, the Mundell-Flemming model assumes that a favourable balance of payments position is arrived at by variations in money supply. It is only under a fixed exchange rate regime that a rise in aggregate remittances or international transfers may induce an increase in national income. This model therefore provides a simple framework to evaluate the complex interaction between the balance of payments and short run shocks.

The impact of remittances, human capital and technological diffusion on economic growth and development can also be formulated within the framework of Endogenous growth model. The Endogenous growth model seeks to explain the factors that determine the growth rate of national output that is left unexplained in the Solow and Neoclassical growth models. If remittances is spent on investment goods, Endogenous growth model provide the channel through which remittances could promote economic growth and development. The argument is that it accelerates the pace of economic growth through enhancing human capital or productivity and the one important channel that this could happen is through technological diffusion.

Massey (1993) summarizes the theoretical arguments of the neoclassical micro and macro theories of migration. The central thesis of the argument is that households are rational beings and attempt to maximize their utility function by taking into account the costs and benefits of net return, and geographic differences in the supply and demand for labour in home country and the country they intend to migrate to. This is a strong factor that drives the motivation for migration to foreign countries and consequently remittances. Other school of thought such as the New Economics of Migration School are of the opinion that migration is one strategy adopted by

households to diversify their portfolio of income streams, reduce risk of poverty and enhance access to financial resources for the household.

Becker (1974) and Cox (1987) introduced the concept of altruism and the obligation migrants have on family members to pay back what was contributed for their travelling expenses. The focus of Becker's argument is that for the migrating household to optimize his utility function would depend on whether or not the well being of the rest of the household he left behind are satisfied. If there is disparity between the income levels of the migrant household and the rest of the family left behind, then the migrant household would be under pressure to remit income to his home country. Cox (1987) conceptualizes remittances as payments for services rendered before migration. This include financial and material support to the migrant to achieve his objective and other intangible services or assistance that the migrant had received over time from those he left behind.

The Model

The model developed in this paper draws theoretical strength from Endogenous growth models. The model demonstrate the channel by which remittances affect economic growth and development and is based on previous works of Romer (1990), Nelson and Phelps (1966) and Benhabib and Spiegel (1994). We begin with a Cobb-Douglas production function as follows;

$$Y = AK^\alpha Z^B L^{1-\alpha-B} \text{-----} (1)$$

Where

Y = national output

A = Total Factor productivity (TFP)

K = physical capital

Z = human capital

L = labour force

Using equation one as an argument, we can define $k = K/L$; $z = Z/L$; $y = Y/L$, which allows us to capture the intensive form of the production function, then equation one yields

$$y = Ak^\alpha z^B \text{-----} (2)$$

Taking log of both sides of equation two we have

$$\log y = \log A + \alpha \log k + B \log z \text{-----} (3)$$

The argument of equation 3 is that per capita output is described by total factor productivity, physical and human capital. Several studies have argued that the growth rate of total factor productivity is a function of the quality of available human capital. For instance, Nelson and Phelps (1966) submitted that education, which is a proxy for human capital contributes to the adoption and implementation of new technologies. To close the gap between theoretical and actual level of knowledge they argued, would depend on the level of human capital. Romer (1990) in his study was also of the opinion that the growth rate of total factor productivity depends on the skilled content of human capital. Benhabib and Spiegel (1994) lend support to the findings of Nelson and Phelps (1966) and Romer (1990) by arguing that human capital has a direct effect on endogenous technological progress.

The literature on the effect of remittances on economic growth and development is ambiguous. Chami et al (2003) found a negative relationship between remittances and economic performance. Catrinescu et al (2006) study contradicts the findings of Chami et al (2003). He found that remittances have a positive effect on economic growth and development when the issue of endogeneity is taken into consideration and are tested in conjunction with institutional variables.

Other studies such as Edwards and Ureta (2003), Hanson and Wooddruh (2003) and Lopez-Cordova (2006) found a positive relationship between remittances and economic growth.

Based on the above literature, we model factor productivity to depend on human capital and the interaction between human capital and remittances. This yields equation 4 as follows;

$$\log A = \delta_0 + \alpha \log z + (\log z * \log \text{REM}) \text{-----} (4)$$

Where

z = the ratio of human capital to labour and directly affect total factor productivity (A).

REM = remittance and indirectly affect total factor productivity.

Inserting equation 3 into 4 yields equation 5 as follows

$$\log y = \delta_0 + \alpha \log z + (\log z * \log \text{REM}) + \beta \log k \text{-----} (5)$$

Equation 5 states that per capita GDP is affected by the level of human capital, the interaction of human capital and remittances and physical capital. To measure total factor productivity we adopted the method of Akinlo (2006) by specifying a Cobb-Douglas type equation where real GDP is regressed against labour and capital under the assumption of constant returns to scale. The estimated factor share is then used to construct a yearly estimate of total factor productivity.

We introduce technological diffusion (techd) variable into equation 5 by taking into account the dynamics of output under the conditional convergence theory, we link the long term growth implications of the endogenous growth model with convergence implications of the neoclassical growth model. The convergence theory argues that followers (developing countries) converge towards leaders (industrialized economies) by copying technology or importing technology. This is because import of technology or copying the existing technology is cheaper than innovation in the short run (Barro and Sala-i-Martin, 1995 and Mankiw et al, 1992). This allows us to write equation 6 as follows;

$$\log Gdppc = \delta_0 + \alpha \log z + (\log z * \log \text{REMt}) + \beta \log k_{\text{apt}} + \text{B} \log l_{\text{bf}} + \partial \log \text{Techd} + \epsilon \log \text{Gexpt} + \text{Ut} \text{-----} (6)$$

Equation 6 argues that per capita GDP has a positive relationship with human capital, the interaction of human capital with remittances, physical capital, labour force, technological diffusion and government capital expenditure (gexpt) on economic and social services.

Following Coe et al. (1997) who argued that there is significant technology transfer from developed to developing countries through import of machinery and equipment, research and development; we measure technology diffusion as aggregate imports of machinery and transport equipment. Coe et al (1997) measured technological diffusion as the weighted average of domestic research and development that developing countries contributed to overall capital stock, using machinery and equipment imports as weight. In Nigeria, it is difficult to obtain data on research and development associated with capital stock, therefore in this paper we used the value of total machinery and equipment imports as measure of technology diffusion (techd), and a priori we expect its coefficient to be positive.

The government capital expenditure on economic services (gexpt) is assumed to influence the level of human capital which is expected to cause improvements in total factor productivity. In addition, higher level of human capital speeds up the adoption of foreign technology that is expected to balance the knowledge gap between the developed and the developing countries (Nelson and Phelps, 1966; Lee 1995; Benhabib and Spiegel, 1994; Loening, 2002). This, in turn is expected to accelerate the pace of economic growth and development.

Table 3.0: Expected a priori signs of coefficients

Variables	Measurement	Expected a priori sign
Logz=log(srnt)	Secondary school enrolment + tertiary enrolment	+
(logz*logREM)	Interaction of human capital with remittances	+
(logtechd*logRem)	Interaction of technological diffusion and remittances	+
Log(Remt)	Log of Remittances inflow	+
Log(kapt)	Log of per capita investment	+
Log(gexpt)	Log of government capital expenditure on economic and social services	+
Log(techd)	Log of total annual imports of machinery and equipment	+
Log(lbf)	Labour force participation index	+

Methodology and Data

This paper investigated the relationship between economic development, remittances and human capital. Indeed, the paper attempted to investigate the human capital and technological diffusion channels by which remittances accelerate economic growth and development. Physical capital, government expenditure on economic and social services and labour employed in the course of economic development are included to investigate their relative impact on Nigeria's economic performance, using annual time series data from 1970 – 2008. The data are all sourced from Central Bank of Nigeria Statistical Bulletin 2005, 2007 and 2008, World Bank Africa Database CD-ROM (2005) and COMTRADE. In order to investigate the relationship that exists between the dependent variable and explanatory variables, this paper adopted the following procedures.

First, the time series characteristics of the variable are investigated. The purpose is to determine the order of integration. The paper conduct unit root test on the variables included in the regression by employing the Ng and Perron (2001) modified Unit Root tests. The objective here is to determine the underlying properties of the process that generate the result and discussion of the analysis, while conclusion is presented in the study time series variables employed. The choice of the Ng and Perron (2001) modified unit root test is based on the fact that the tests are more suitable for small samples than the traditional tests. In addition, as observed by Sinha (2007) the null hypothesis of a unit root is not over-rejected when Ng and Perron (2001), modified unit root tests are employed.

Second, the paper proceeds further to test the long-run (co-integration) relationship between the variables used in the model by employing the (ARDL) bounds testing approach to co-integration proposed by Pesaran et al (2001). In this paper, the Autoregressive Distributed Lag (ARDL) bound test used extensively by Pesaran and Pesaran (1997); Pesaran and Smith (1998) and Pesaran et al (2001) are employed. This technique has a number of advantages over Johansen co-integration techniques. Whereas the Johansen techniques require large data sample, a luxury that most developing economies do not have, the ARDL model is the most useful method of determining the existence of co-integration in small samples (Ghatak and Siddiki 2001).

A second advantage of ARDL approach is that while other co-integration techniques require all of the variables to be of the same order, the ARDL approach can be applied whether the variables in the regression are purely of I(1) and/or purely I(0) or a mixture of both. This implies that the ARDL approach avoids the pre-testing problem associated with standard co-integration, which requires that the variables be already be classified into I(1) (Pesaran et al 2001).

A third advantage of the ARDL method is that if a researcher is not sure of the unit root properties of the data, then applying the ARDL procedure is the most appropriate model for empirical work. As observed by Bahmanio-Skooee (2001), the first step in any co-integration technique is to determine the order of integration of each variable in the model. This however, would depend

on which unit root one uses, and different unit root test could lead to contradictory results. For example, applying the conventional unit root test such as Augmented Dickey Fuller and Phillip-Peron tests, one may incorrectly conclude that a unit root is present in a series that is actually stationary around a one-time structural break. This problem of testing for unit root is avoided with ARDL approach.

The ARDL approach requires two steps. In the first step, the existence of any long run relationship among the variables of interest is determined by using the F-test. The second stage requires the estimation of the long run relationship and to determine their values, thereafter the short run elasticity of the variables with the error correction representation of the ARDL model. The purpose of applying the ECM version of the ARDL is to determine the speed of adjustment to equilibrium. As argued by Pesaran and Pesaran (1997), the ARDL model is presented in equation 7.

$$\begin{aligned} \Delta Lgdppc_t &= a_0 + \sum_{i=1}^P \alpha \Delta Gdppc_{t-i} + \sum_{i=0}^P \theta Lz_{t-i} + \\ &\sum_{i=1}^P \lambda LRemt_{t-i} + \sum_{i=0}^P \beta \Delta Lkapt_{t-i} + \sum_{i=0}^P d \Delta Ltechd_{t-i} + \sum_{i=0}^P \partial Lgexpt_{t-i} + \\ &\sum_{i=0}^P \delta_1 Llbft_{t-i} + \delta_1 LGDPPc_{t-1} \\ &+ \delta_2 z_{t-1} + \delta_3 Remt_{t-1} + \delta_4 Lkapt_{t-1} + \delta_5 Ltechd_{t-1} + \delta_6 Lgexpt_{t-1} + \delta_7 Llbft_{t-1} + U_t \dots \dots (7) \end{aligned}$$

Where

$\delta_i, i=1,2,3,4,5,6$ and 7 are the long run multipliers

$\alpha, \theta, \lambda, \beta, d, \delta, \partial =$ are the short run dynamic coefficients of the ARDL model

$\Delta =$ is the first-difference operator

$P =$ optimal lag length

The F-test is used to test the existence of long run relationship. When long run relationship exists, F- test indicates which variable should be normalized. The null hypothesis for no co-integration among variables in equation (7) is

$H_0: \Delta_1 = \Delta_2 = \Delta_3 = \Delta_4 = \Delta_5 = \Delta_6 = \Delta_7 = 0$ against

Against alternative

$H_1: \Delta_1 \neq \Delta_2 \neq \Delta_3 \neq \Delta_4 \neq 0 \Delta_5 \neq \Delta_6 \neq \Delta_7 \neq 0$

The F-test has a non-standard distribution which depends on whether variables included in the model are $I(0)$ or $I(1)$; the number of variables and whether the model contains an intercept/or a trend. Given a relative small sample size in this study of 38 observations, the critical values are as reported by Pesaran et al (2001) which is based on small sample size.

If the F-test statistics exceeds their respective upper critical values, we can conclude that there is evidence of a long run relationship between the variables regardless of the order of integration of the variables. If the F-test statistics is below the upper critical value, we cannot reject the null hypothesis of no co-integration and if it lies between the bounds, a conclusive influence cannot be made without knowing the order of integration of the underlying variables.

If there is evidence of long run relationship (co-integration) of the variables, the following long run model is estimated

$$\begin{aligned}
 \text{Lgdppc}_t = & \alpha_1 + \sum_{i=1}^p \text{QLgdppc}_{t-1} + \sum_{i=0}^p \beta_{1i} \text{Logz}_{t-1} + \sum_{i=1}^p \theta_{1i} \text{LogRemt}_{t-1} + \\
 & \sum_{i=1}^p \lambda_{1i} \text{Logkapt}_{t-1} + \sum_{i=1}^p d_{1i} \text{Logtechd}_{t-1} + \sum_{i=1}^p d_{1i} \text{Loggexpt}_{t-1} + \sum_{i=1}^p \partial_{1i} \text{Loglfbt}_{t-1} + U_t
 \end{aligned}
 \tag{8}$$

Empirical Result and Discussions

The results of the Ng and Perron (2001) modified unit root test are presented in table 4.0. Three of the variables under scrutiny namely GDP per capita (gdpcap), secondary school enrolment (srnt), government expenditure on economic and social services (gexpt) are I(1) process, which means that they are stationary at first difference. Capital (Kapt) and Labour force (lfbt), remittances (remt), technological diffusion (techd) are I(0) process, implying that they are stationary at levels.

The purpose of testing the stationarity properties of the variables in bounds approach to co-integration is because the (ARDL) bounds testing approach is applicable only in the presence of I(1) and I(0) variables or a mixture of both. This means that the assumption of bounds testing will collapse in the presence of I(2) variables (Pesaran et al 2001). The Ng and Perron (2001) modified unit root results presented in table 4.0, implies that the bounds testing approach is applicable in this study, as all the variables are a mixture of I(1) or I(0).

The next task of the paper having established the order of integration of variables included in the model is to estimate equation 6. The purpose is to establish the long run relationship among the variables. Following Pesaran et al (2001), since the time series are annual, the paper adopt 2 as the maximum order of the lags in the ARDL and estimated equation 6, if co-integration exists among the variables included in the model, we proceed to estimate equation 8 for the period 1970-2008. The calculated F-statistics for the long run model and short run error correction model is presented in table 4.3. The critical values are reported in the same table and are based on critical values as reported in Pesaran et al (2001). The calculated F-statistics for the long run model is 6.75 and that of the short run model is 5.98. These values are higher than the upper and lower bound critical values at 5 per cent levels of significance. This implies that the null hypothesis of no co-integration cannot be accepted at 5 per cent and 10 per cent levels of significance and therefore, there is a long run relationship among the variables under scrutiny.

The long run result indicates that human capital proxy by secondary school enrolment, physical capital, labour force, government expenditure on economic and social services and technological diffusion are significant factors influencing GDP per capita. This is because the five variables do not only conform to a priori economic expectations; they are statistically significant at 5 and 10 per cent levels of significance. Their statistical significance strongly suggests that a 1 per cent increase in human capital, physical capital, labour force, government expenditure and technological diffusion leads to about 2.6, 2.1, 2.1, 0.7 and 0.9 per cent increase in real output respectively.

Following the estimation of the long run coefficients, the paper proceeds to estimate the error correction model. The paper adopts the general to specific approach to arrive at the parsimonious estimate by eliminating jointly insignificant variables. The error correction term shows the speed of adjustment to restore equilibrium in the dynamic model. In particular, the ECM coefficients show how quickly variables converge to equilibrium and the ECM coefficient is expected to have a negative sign. As observed by Gujarati, (2004) a highly significant error correction term is a strong confirmation of the existence of a stable long run relationship.

The result of the error correction model indicates that the error correction term (ecm1) is well specified and the diagnostic statistics are good. The ECM1 variable has the correct a priori sign and is statistically significant. The speed of adjustment of 0.41 shows a modest level of convergence. In particular, about 41 per cent of disequilibrium or deviation from long run growth rate of GDP in the previous period is corrected in the current year. The Durbin Watson (DW) statistics value of 1.8 shows the absence of first order serial autocorrelation in the model. The value of adjusted R^2 of 0.68 indicates a good fit. In particular, the model explains about 68 per cent of total variations of the dependent variable around its mean.

The paper conducted stability test of the long run and short run coefficients using the cumulative sum (CUSUM) and the cumulative sum of squares (CUSUMQ) and Jarque-Bera normality tests. As observed by Bahmani-Okooee (2001), the stability of the regression coefficients is evaluated by stability tests and stability tests can show whether or not the regression equation is stable over time. This stability test is appropriate in time series data, especially when one is uncertain when change might have taken place.

The null hypothesis is that the coefficient vector is the same in every period. CUSUM and CUSUMQ statistics are plotted against the critical bound of 5 per cent significance. As noted by Bahmani-Oskooee and Wing NG (2002), if the plot of these statistics remains within the critical bound of 5 per cent significance level, the null hypothesis, which states that all coefficients in the error correction model are stable, cannot be rejected. The results of these tests strongly suggest that the model is fairly well specified and robust for policy analysis.

The result based on table 4.2 indicates that human capital has a positive effect on economic performance. This implies that economic performance is determined by the quality of human capital. A priori the remittance variable agrees with theoretical predictions, but it was not statistically significant at various lags. The paper argues that remittances promote economic development but this is interpreted with caution as the value of t-statistics does not allow us to place confidence on this inference. The interaction of remittances with human capital enters with a positive sign and is significant. This strongly suggests that remittances have a positive impact on economic development but only within certain threshold of human capital development.

Technological diffusion and labour force coefficients have the correct a priori sign and is statistically significant. This means that to accelerate the pace of economic development, the country needs to ignite a simultaneous increase of technology diffusion and the skill level of the labour force. The interaction of technological diffusion and remittances is positive and significant, suggesting that remittances impact on economic development via transfer of foreign technology or importation of technology.

The government expenditure variable entered the short run model with the correct a priori sign and was statistically significant. Physical capital and labour force equally entered the short run error correction model with the right a priori signs and were significant. The implication of this is that a one per cent increase in government expenditure, physical capital and labour force will lead to 0.5, 1.8 and 2.6 per cent increase in per capita GDP.

Conclusion

This study attempted to investigate the impact of remittances on economic development through human capital and technological diffusion in Nigeria from 1970 to 2008. To do this the paper adopted the endogenous growth as a theoretical guide and estimated the parameters of the model using OLS estimation technique. To test the time series characteristics of the variables included in the model and long run relationship of variables, the paper adopted the Ng and Per-

ron (2001) modified unit root test and Autoregressive Distributive Lag (ARDL) bounds testing approach to co-integration developed by Peseran and Peseran (2001).

The short run error correction results indicate that with the exception of remittance variable all other variables of interest had the correct a priori signs and were statistically significant. The findings of this study strongly suggest that for remittances to accelerate the pace of economic development, it requires complimentary factors. These include high level of human capital development, technological diffusion, physical capital and increase investment in education and infrastructure.

Education and training are the key drivers of economic development and as observed by Dahlman et al (2005) skilled human capital provides the platform by which economies could transit from Old Economy to New Economy. In the New Economy, knowledge can be created and applied to achieve any desirable national objectives. Since remittances accelerate the pace of economic development through the complimentary role of human capital, policy makers in Nigeria should provide the right environment for the easy repatriation of foreign earnings.

The statistical significance and the correct a priori sign of the government expenditure variable have important policy implications. The Nigerian government need to fine-tune its domestic policies to stimulate the simultaneous increase in technological absorption via aggressive investment in human capital development and complimentary infrastructure that would further deepened the quality of the labour force. Increase incentives for both human capital formation and a reduction in the cost of technology adoption.

Appendices

Table 4.0: Ng and Perron (2001) Modified Unit Root Tests

Variables	MZa	MZt	MSB	MPT
$\Delta\log(\text{gdppc})$	-18.6301	-3.02188	0.16220	1.42329
1%	-13.8000	-2.5800	0.17400	1.7800
5%	-8.1000	-1.9800	0.23300	3.1700
10%	-5.7000	-1.6200	0.27500	4.4500
$\Delta\log(\text{srnt})$	-18.9187	-3.07555	0.16357	1.29522
1%	-13.8000	-2.5800	0.17400	1.7800
5%	-8.1000	-1.9800	0.23300	3.1700
10%	-5.7000	-1.6200	0.27500	4.4500
$\text{Log}(\text{techd})$	-70.6213	-5.54101	0.07846	1.19042
1%	-13.8000	-2.58000	0.17400	1.7800
5%	-8.1000	-1.98000	0.23300	3.1700
10%	-5.7000	-1.62000	0.27500	4.4500
$\Delta\log(\text{gexpt})$	-17.2310	-2.77663	0.16114	1.98897
1%	-13.8000	-2.5800	0.17400	1.78000
5%	-8.1000	-1.9800	0.23300	3.17000
10%	-5.7000	-1.6200	0.27500	4.45000

log(kap)	-16.1012	-2.83271	0.17593	1.53888
1%	-13.8000	-2.5800	0.17400	1.7800
5%	-8.1000	-1.9800	0.23300	3.1700
10%	-5.7000	-1.6200	0.27500	4.4500
log(lbf)	-7.49221	-1.86393	0.24878	3.52739
1%	-13.8000	-2.5800	0.17400	1.7800
5%	-8.1000	-1.9800	0.23300	3.1700
10%	-5.7000	-1.6200	0.27500	4.4500
log(Rem)	-25.2861	-3.22297	0.12748	5.46680
1%	-23.8000	-3.42000	0.14300	4.03000
5%	-17.3000	-2.91000	0.16800	5.48000
10%	-14.2000	-2.62000	0.18500	6.67000

Table 4.1 Over-Paramatized Estimation Result

Variable	Coefficient	T-statistics	Probability
Log(srnt)	-0.013593	-0.322115	0.7583
Dlog(srnt(-1))	-0.260070	-5.131793	0.0022
Log(remt(-1))	-0.006701	-0.252464	0.8091
Log(rem(-2))	-0.036925	-1.463357	0.1937
Log(kapt)	0.176458	1.817588	0.1190
Log(kapt(-1))	-0.211896	-2.451462	0.0497
Log(lfbt)	0.471289	1.793709	0.1230
Log(lfbt(-1))	-0.388858	-1.103716	0.3120
Dlog(gexpt)	0.007818	0.280230	0.7887
Dlog(gexpt(-2))	0.075298	1.962990	0.0973
Log(techd)	-0.08890	-1.46208	0.1983
Log(techd(-1))	0.098288	1.672196	0.1455
Ecml(-1)	0.040287	0.649999	0.5398

$R^2 = 0.74$; DW = 2.0

Table 4.2 Parsimonious Result

Variable	Coefficient	T-Statistics	Probability
C	0.125005	0.231103	0.8211
Dlog(srnt(-1))	0.234947	4.803946	0.0004
Dlog(remt)	0.006418	0.311234	0.7610
Log(remt(-1))	0.014979	0.589921	0.5663
Log(remt(-2))	-0.019496	-1.17688	0.2621
Log(kapt(-1))	0.184595	2.395493	0.0338
Log(lfbt)	0.266525	1.588834	0.1381
Log(gexpt(-2))	0.053883	2.087988	0.0588
Log(techd(-1))	0.106097	2.053376	0.0625
Log(srnt)*log(remt)	0.388499	6.05874	0.0023
Log(techd)*log(remt)	1.821714	16.48377	0.0000
Ecml(-1)	-0.41355	-3.02014	0.0435

$R^2 = 0.68$; DW = 1.8; F-statistics = 5.98

Table 4.3: F-statistics for testing for the existence of Long Run relationship

Computed F-statistics (long run model)	6.75
Computed F-statistics error correction model	5.98
Bound Testing Critical Value	5% lower (2.365); upper (3.553)

The critical values are taken from Pesaran et al (2001), unrestricted intercept and no trend with seven variables at 1 per cent is 3.027 to 4.296; at 10 per cent are 2.035 to 3.153.

Fig 3.1

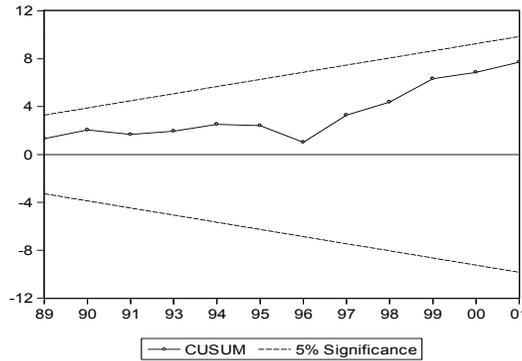
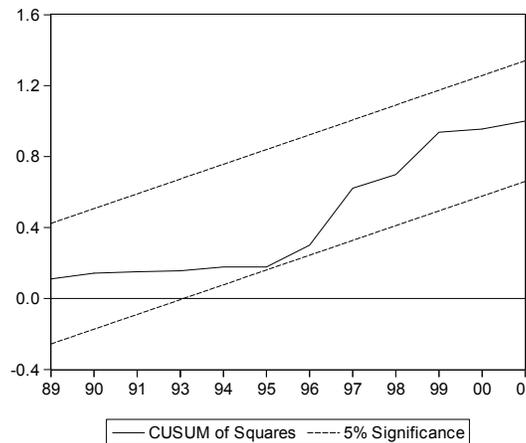


Fig. 3.2



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