SOCIAL CHANGE

A Journal for Social Development

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Understanding public Participation in public policy

Md. Shairul Mashreque*
M. Abul Kashem Mozumder**

Participation is a concept as well value some what echoing poputaristic our tone. People as public are said to be aware of their involvement in the assessment of their own needs and in the determination of the priorities of public policy. As policy consumers they are individually and collectivity aware of their own predicaments, human rights and public affairs. So, Participation by implications involves all promotional activities and modern extension services tilting policy intervention in favor of community interests. Organizationally linked both horizontally and vertically participatory institutions are an effective channel of communication between policy communities and the public as the beneficiaries of development.

Public policy as the means of allocating values and setting development goals becomes a factor of facilitating / constraining participation. Redistributive policies prevent misallocation of resources and opsided access to inputs and logistics reducing vulnerability of the poor to dependence relationship. Favorable public policy in the direction of empowerment of the vulnerable masses serve as a suitable institutional mechanism to ensure a more equitable sharing of power, a high level a concretization about human rights and capacity building of the disadvantaged group to bargain hard with elites as the dominant policy actors.

Public policy

A fuller understanding of public policy cannot be obtained only by a small collection of definition of the concept. For the connotation of public policy is based on a broad conceptual plane. A wealth of literature on the subject gives us a modicum of understanding public policy [1]. Even then one should ask what is not public policy rather than what it is. Many a variable running through the concept is brought into definitional continuum to facilitate understanding polemics and activism associated with the operational

***   Professor, Dept. of public Administration, Chittagong University, Bangladesh.
**** Professor and Chairman, Dept. of public Administration, Jahangirnagar University, Dhaka, Bangladesh.

aspect of government, autonomous bodies, NGOs and participatory institutions.

Public policy, as such, is wide ranging encompassing a variety of substantive areas-agriculture, industry, environment, energy, education, health, poverty alleviation and so forth. One has to conceptually understand the causes and consequences of the projected programmes of goals, values and practices in connection with these policy areas and related issues.

As public policy is a mere reflection of the choices and to preferences of the upper echelon in the hierarchy commoners hardly find any access to opportunities for placing policy demands. They are ignorant about policy issues the treatment of which calls for technical knowledge, intellectual intervention and bureaucratic expertise.

Public Participation

The concept of public participation has assumed growing significance now-a-days. It tantamount to enhancement of public involvement in the determination of priorities in tandem with their own choices and preferences. Participation also means mass involvement in social action, social movement, awareness building, bargaining, social mobilization, forming association/club, organizing meetings, seminar / workshop, collective contact with official and development partners.

Studies-to-date on the concept outlined the issue of public in development jargon [2]. Public participation is anchored in decentralization, democratization, mass organization, consumer's association and group formation with collective interest. Public means ordinary masses, community of people, and a vast body of citizens enjoying civil and political rights. It also means tax payers, electors, beneficiaries and consumers of public policy.

Prospect of public participation

The prospect here is bound up with the development of egalitarian society with redistributive measures, democratic participation and decentralization. The thematic views on development policies as reflected in contemporary studies on poverty alleviation reveal a growing concern about public as beneficiaries. Poverty alleviation programs are expected to positively affect the society with participatory development interventions. The performance of the plenty of action programs has to be satisfactory to

minimize the gap between aspiration and achievement.

In poverty alleviation rhetoric empowerment of the vulnerable is the frontline component of participation. There has been a policy intervention to activate the vast reservoir of human resources to educate the poor, to reduce income poverty and enhance their nutritional status. Such intervention is a symbol of realization about the inadequacy of the resources of the poor and the powerless.

Of late PRSP has been accepted as a time bound strategy to help the poor reach access point. Policy analysis and advocacy about targeted safety net and empowerment of the poor in the PRSP purports to accelerate pro poor economic growth to give a tangible meaning to egalitarian society. Understandably Millennium Development Goal (MDG) has marked poverty reduction as one of its projected objectives. PRSP is a strategic concept paper drafted in line with such objectives.

The state recognizes the critical importance of participation for poverty alleviation. There has been a concern about accelerating promotional process with the participation of NGOs and local self governing institutions to break the chain. This is process of community regeneration to enhance the abilities of the left outs to mobilize, manage and control local and external resources. The whole range of the recent policy action relates to the gradual obliteration of poverty syndrome even in hard core poverty situation in putting the last first. The poor are to be directly approached with program inputs and the stated purposes of advocacy for policy strategy.

Democratic participation or democratic decentralization promotes democratization of fundamental policy institutions. The extent of such participation ensures representation, public debate and new leadership. This is an institutionalized expression of public participation having much to do with opinion polls, public hearings, national and local elections and referendum on outstanding issues An election not only provides the electorate with an opportunity to express its opinion but also ties key office holders directly to their constituencies. The thread of removal from can functions as a powerful control over policy [3].

Participatory democracy in action as a pre-requisite to public participation can hardly be judged as insignificant. It expresses itself as truly democratic institution to influence policy making in a desired manner. It is a

guard against tyranny and erratic authoritarian behavior. It serves as a channel of information with the involvement of interest groups, civil societies and mass media.

Myth of participation

Public participation is quite rhetorical. In reality participation in policy making becomes instrumental only on the basis of economic position, organizational strength and political power. The masses of lower order are not properly represented in public bodies, NGO's and private organizations. The result that may follow is that the level of net achievement in terms of desirable changes in socio-economic indicators-' measures of well being in society is not attained'.

As public policy is encapsulated by bureaucratic rituals and intricacies in technical aspect of planning, programming and resource injected in it the structure of participation in accommodating a large variety of individual preferences is far from effective. A number of scholarly works indicate that bureaucratic participation is responsible for the failure of reform programs in developing countries. Reform programs may emphasize decentralized planning. Local leadership, bureaucracy and technocracy may find a chunk of opportunities in working out the modalities of participatory local planning.

Public policy hardly concerns with the needs of the consumers. Rules and regulations associated with policy operations tend to quench public choice and undermines the interests of consumers of goods and services[4].

Adverse socio-economic climate negates the thesis of public participation. In reality the public does not have proper place in policy arena. Public policy takes little notice of participatory measures. Elitism is the revealing aspect of social life. Overlapping of elite in all stages in policy cycle is obvious. The concern for beneficiaries participation continues to remain the concern of elite.

Public policy is institutionally shaped without little relevance to the issue of public grievances. Institutional focus is too narrow to allow for free flow of opinions. It does not seem to provide an outlet for participation in open ended discussion. An inwardly directed policy making process cares little about outstanding and minor issues.

Consummer's rights : Points to ponder

A strong institutional base for ensuring consumer's rights is quintessence of consumer's participation. It shapes feedback mechanism to accommodate a large variety of consumer's preferences. Consumer's associations as organized citizen bodies – civil societies in other words- are doing their utmost as watchdog to prevent any obnoxious process that impairs normal functioning of market. The concerns for protection of consumer's right against such processes remain the concerns of the consumer's association.

A vibrant civil society with consumer's activism as citizens can redynamize governance in information age articulating the interests of the consumers of goods and services. Participatory components of consumer's sovereignty in western democracy provide institutions for communication between the policy community and consumers. The members of the policy communities being the members of the civil societies reinforce such communication. This is clearly manifest in the advocacy for normal market operation enabling the consumers to have access to goods and services.

Growing partnership between the business communities and consumers/ customers is a sign of participation. Consumer's sovereignty as anchored in such participation may go to the extent of forming consumer's society for awareness building, market information, consumer's preferences for good and quality services in competitive market, and protection against the evils of syndication. In Bangladesh, for example, there are associations of stakeholders to speak for the consumers in conference rooms and meetings. This is, of course, a dear indication of participation. Yet, anti-adulteration drives taking place now and then makes it clear that the vulnerability of the consumers to the whims of unscrupulous traders has reduced such participation to nullity.

Public choice theory is a convenient analytical tool conceptually understanding policy consumers. It stretches over a wide array of choice-centered activities fitting well into democratic structure and economic liberalism. Such theory, as such, provides knowledge about the underlying dynamics of consumerism as an essential ingredient of consumer's sovereignty. Input-function of public policy seeks adjustment with economic environment taking stock of public demand for consumer durables and competitive price in the market. Any policy change in economic world like market that tends to influence public choice. The cardinal point in public choice is methodological individualism in the application of rationality in democratic theory and economic liberalism. It proclaims free flow of market transaction without interruption and distortion. Market is supposed to operate in normal conditions to maximize social welfare.

Predicaments of the consumers are associated with distortion and malfunctioning of the market. In Bangladesh such predicaments have become a way of life. A market deterioration in the material conditions in the stressful economic life has seriously affected consumers leaving them into a cauldron of crises. On the contrary, the upstart traders in collaboration with criminal syndicates have been stumbling onto overnight riches. The concerned authorities have a tendency to blissfully overlook such crises. And, the ordinary consumers happen to be 'a threatened sopecies'. The upstart traders amidst criminalization of business are consistently swindling them. The proceeds of business—not according to rules – have shattering impact on policy consumers. Inordinate profiteering, hoarding, black marketing, and adulteration matter a lot in afflicting the consumers.

In Bangladesh , the urbanities now live in the state of insecurity as well as uncertainty. Two – fold dangers confronting the urban consumers are under consumption and health hazards arising out of price spiral and massive adulteration. The onslaught of criminihzation in commercial operations continued to jeopardize the rights of the consumers in the recent past. Added to it many a fraud practice unnoticed by the authorities went against public safety and security. Even now, the ordinary consumers have mush less access to the concerned authorities and the latter have been found to be inefficient – not equal to the task in the face of manipulation of the market by the criminal syndicates.

However , social movement in consumer's regime puts consumerism first. 'Consumer's Voice is at the heart of such movement. Of course, belatedly, the Consumer Association of Bangladesh organized such movement through awareness building campaigns, conferences, rallies and publications. This is in response to the development of consumerism at the global level. Initially, there were four globally recognized rights of the consumers: 1. the right to safety, 2. the right to be informed, 3. the right to choose and 4. the right to be heard.

Later on, four more rights were incorporated in the UN guidelines for consumer protection. They were: 1. the right to protection against exploitation by unfair trade practices, 2. the right to protection of health and

safety from the goods and services the consumers buy or are offered free, 3. the right to get the grievances redressed and 4. the right to physical environment that will protect and enhance the duality of life[5]. Of course constitutional provision of basic necessities recognizes protection of life through safe and clean food, 'safe drinking water, public health hygiene, sanitation and safety.

Consumer Association of Bangladesh (CAB) is the first non-governmental voluntary association that works towards shaping the themes of the development of consumer's rights. The major areas of its concerns include, thus, education for the consumer, investigation of the consumer complaints, advocacy for consumer right, research, information and documentation, campaign against health hazards, etc.

CAB speakers at 'a daylong orientation of media personnel's in Rajshahi 'Underscored the need for enacting a law for protecting consumer's right' focusing on the 'right to information, choice, redress and representation'.

The consumers are always deprived of the quality of services of gas, water, electricity, education and health. The CTG has already approved in principle the consumer Rights Protection Ordinance 2007 to provide "full-fledged legal cover for consumer's interests. The proposed new ordinance provides for the formation of a 21-member council with Commerce Minister as its Chairman including Presidents of FBCCI, jatiya press Club,CAB and a representative from civil society as other members. The committee will enjoy the functions like preparing policy guidelines, holding periodic meetings, conducting research and formatting committees at the district and sub-district levels.

It indicates that something positive is going to happen to promote development of consumer right as a social movement. We cannot but appreciate the role of CTG in shaping legal dimension of consumers rights against the contextualism of inflationary stress, abnormal price-spiral, adulteration, rigging in weights, etc. The process of legislation started since 2001, but it was held up for a long time.

Actions Suggested

Actions Suggested for the kind attention of the policy makers may be mentioned below :
- Business malpractices in existence in the country have damaging impacts on the consumers. Adequate intuitional control may well be exercised to minimize such practices that are responsible for extremely high prices, adulteration, shoddy commodities and environmental degradation. It is advisable to rid market of all kinds of distortions enabling it to operate transparently to maximize social welfare.
- In a conference on 'Business and Society' held on 19th July,2007 at Hotel Agrabad,Chittagong, there was a thematic paper focusing on the need for a comprehensive competition law in Bangladesh. This is, of course, thought provoking. We know anticompetitive business practices are characterized by hoarding,' restrictive supply of essential commodities,' collusive price-fixing' and 'abusive monopoly'. Such practice tends to hurt consumer's interests. The article highlights among others recommendations: pro-competition economic policies coupled with a competition law to ensure a competitive market economy. Competition legislation can prevent 'collusive cartels,' unscrupulous market dominance,' unfair mergers and acquisitions' and other anti-competitive business practices.
- Consumptive value added tax (VAT) is certain to come under review. This sort of indirect tax makes consumers bear the burden of tax imposed on each transition. Such tax is added to the value of the sale of goods and services in retail price shops. But the burden is shifted to the consumers leading to price hike all to their dissatisfaction. And, the extreme use of VAT system touching even the trivial matters, as was the case with economic management style of the Ex-finance Minister, might vex the consumers inviting vehement public criticism.
- Governance has now become a much talked about issue featuring prominently in development dialogue. What is considered of importance is development of social capital as reflected in past business tradition in the Eastern Countries molded by the moral values of socialization. We should consider ethical social fabric, religious spiritual moorings, positive mindset and corporate governance.
- E-governance for commercial operation and customer service is a good idea. But, we are lagging behind in the field of service marketing or customer service. It requires efficient management of service organization to focus sharply on the needs of the customer. Banks rendering credit and ATM facilities may be advised to remove unnecessary charges.
- Now services in the age of information offer much promise to consumers are threatened to be deprived with lingering with bureaucratic constraints. We should take lessons from the new paradigm like new

public management (NPM) that proclaims flexible bureaucratic operation in favor of the consumers. The CTG seeks to involve public sectors in the distribution channel of business to counter-balance business malpractice in the private sector. This is a good idea calling for wide networking.

- BSTI ought to be revamped with enhanced manpower to promote adequate capacity disposition. Its operational coverage needs to be extended both horizontally and vertically. Here, attention may be called to strict monitoring of the quality and size of the food products in bakeries, food industries and restaurants. What really matters much is the practice of reducing the size of the food product on the plea of price hike of the ingredients like wheat, edible oil etc. Such practice should not go unpunished. Authorities should take a serious view of the profiteering tendencies of the sweet traders. When the price of sugar increases, they turn to increase the rate of sweets per K.G,when if falls (the rate of sugar)they do not go back the previous rate.
- Establishment of Consumer Development Council.
- Advocacy for public policies to protect the rights of the consumers.
- Empowerment of CAB with infrastructural facilities to strengthen consumer's movement. There needs to be a functional collaboration between CAB and BSTI.
- Formation of consumer's cooperatives in each housing society to facilitate participatory marketing.
- Improved action of public utilities like WASA,WAPDA, PDB, DESA, TNT, TITAS, enabling them to meet the rising expectation of the consumers in modern time using New Public Management (NPM) as an acceptable doctrine.

Conclusion

The rhetoric of participation can be viewed from the perspective of non participation of the public. Public content to participation in policy making may be conceived only as cosmetics. This seems to be the paradox of democracy. The real actors are political elite in political nature of public policy. Even then mass opinions are institutionalized through representation in various public bodies, committees and councils. Bureaucratization of implementation process makes rhetoric of participation more expressive. The rigidity of the bureaucratic colture is dysfunctional to public participation.

However public policy that steers in normative order to achieve its goals – the promotion of public good is the outcome of the various forces includ-

ing organized citizen bodies, So public participation is epitomized by good governance through sensible bureaucracy accountable for its action to the people and various interests groups – even the associations of disadvantaged people like the landless, weaver, women and vulnerable children, participating in public affairs.

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Human Resources Development for Sustainable Aquaculture in Bangladesh

Dr. Hossain Zamal*,
Uzzal Kanti Das**
Prabal Barua ***

Abstract

The ennoblement of human resources has become a prime issue in the philosophy of sustainable aquaculture development in the new millennium. Being the planners, designers, conductors and philosophers of sustainable aquaculture, human beings always demand their further improvement at level best from their current positions to bring supreme success in the sector. As sustainable aquaculture is socio-economic –cum-environmental in concept, its operation and management requires constant interplay of various human knowledge for ensuring its smooth direction and for achieving its goal. So, the arrangement of different types and levels of training and education are the great need for the development of personnel involved in sustainable aquaculture route and also for growing awareness of environmental issues. The modus operandi of training and education has to be changed systematically to answer the calls of the needs of the new millennium. In the developing and developed countries where aquaculture plays a vital role in promoting production of aquatic organisms, alleviating of poverty, ensuring environmental compatibility, replenishing and improving the natural stocks, increasing socio-economic upliftment through integrated development approach, developing and managing the aquatic resources, maintaining gene banks and preserving the diversity of fish stocks, it has been already proved that Human resources development (HRD) is inevitable to bring sustainable aquaculture and plays a great role in the flourishment of the system . Different types and levels of training of personnel required for sustainable aquaculture in the new mil-

*   **Professor, Institute of Marine Sciences and Fisheries, University of Chittagong, Chittagong, Bangladesh**

**   **Research Associate, Institute of Marine Sciences and Fisheries, University of Chittagong, Chittagong, Bangladesh**

*** **Associate Programme officer, Young Power in Social Action, Chittagong, Bangladesh.**

lennium are brought forward in the study. The importance of human resources development (HRD) through specialized training to the personnel is also depicted.

1. Introduction

Human resources are at the focal point of philosophy of all sustainable development. They are the creators, operators and protectors of any sustainable development. As sustainable aquaculture is the united venture of man's attempts and knowledge, various sciences, arts, economics, biotechnology and business filed for the purpose of promoting or improving growth and hence pursuit of production from water, concerned land, animal, plant genetic resources, is environmentally non-degrading, technically appropriate, economically viable and socially acceptable. So the development of human resources is the great need for enjoying successful sustainable aquaculture in the view of millennium.

Sustainable aquaculture requires scientific, systematic, technical and logical manifestation of unifies and well organized thoughtfulness of well developed manpower for enjoying auspicious starting and for finding the proper way for the proper execution and management and hence a successful ending of it. As a follow up to this, aquaculture is likely to sustain itself based on economic viability alone, but will need to ensure social and environmental sustainability as well (Kutty, 1977).

At present, aquaculture has to advance at the same speed with the increasing need of a growing population and economic upswing in most developing countries. There is a great need to increase production per unit of area to meet the needs of the generation in the new millennium by exploring changes in technologies by the skilled or trained personnel. The aquaculture products should be maintained in hygiene standards with quality and the system must be eco-friendly.

So, the development of human resources is the key issue for sustainable aquaculture in the new millennium. As aquaculture revels itself as a great potential for the alleviation of poverty and represents the waves of the future in human food production and provides excellent opportunities for employment and income generation, so we should set our eyes on the development of the sector by ennobling the involved personnel.

1.1 Human Resources Involvement in sustainable aquaculture development

Human beings which are engaged in starting, operating, managing and achieving the goals or objectives of any development are called Human

Resources Development (HRD). There are different types of human resources are available in any development activities. They are the key-components of the sector. Human resources consultants, human resources development specialists and human resources coordinators-help to match employers with qualified jobseekers. Human resources involvement in sustainable aquaculture are available from the following sectors: 1) research organizations, 2) governmental organizations 3) Non- governmental organizations and 4) Farming sectors.

However, human resources who are employed in sustainable aquaculture development are mentioned more specifically in below:
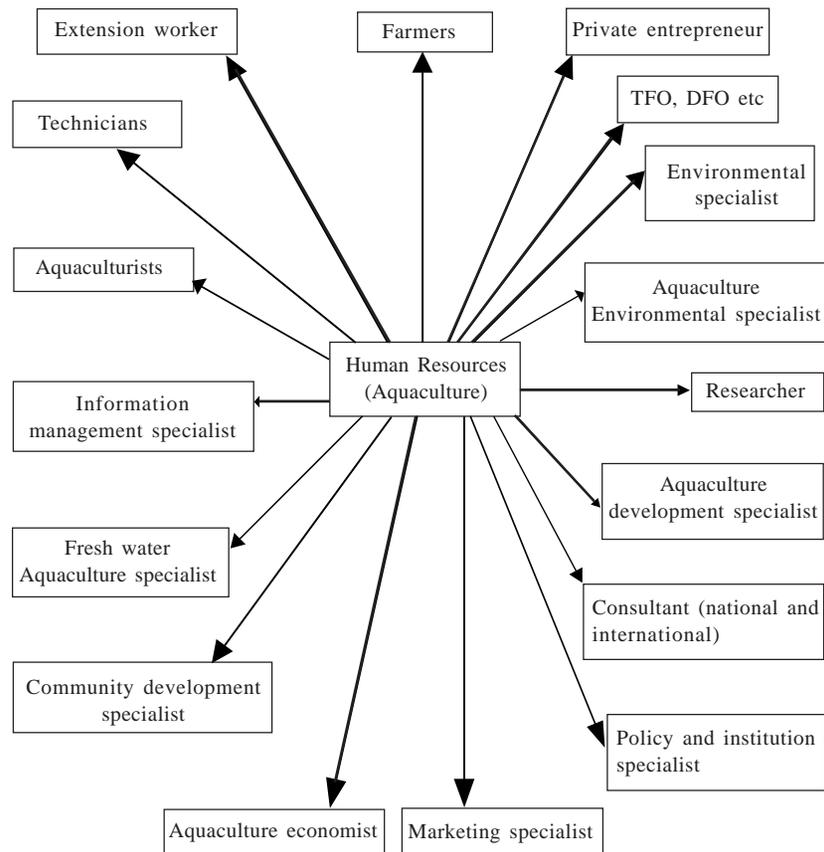

Fig: flowchart for the Human resources in aquaculture development

1.2 Interaction and collaboration among various human resources

There is an increasing trend towards creating partnerships and collaboration between aquaculture production and scientists, government officials and other stakeholders. Producers are recognized as key players of sustainable aquaculture development, being direct users of resources during the production of food. However, more interaction and better communication and coordination between them and natural and social scientists and other stakeholders interested in aquaculture, is required. Producers should have a better stakeholder position through stronger representative associations particularly in view of the complexity and internationals dimensions of sustainability issues and also in view of the complexity and international dimensions of sustainability issues and also in view of the diversity of the world. Aquaculture producers must play a stronger participatory role in sectoral development but the conditions for an effective stakeholder position in many cases have yet to be fulfilled.

1.3 What is Sustainable aquaculture?

Sustainable aquaculture development is maintaining a delicate balance between the human need to improve lifestyle s and feeling of well-being on one hand, and preserving natural resources and ecosystems, on which we and future generations depend.

According to the WCED, this "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Sustainable aquaculture development implies economic growth together with the protection of environmental quality, each reinforcing the other. The essence of this form of development is a stable relationship between human activities and the natural world, which does not diminish the prospects for future generations to enjoy a quality of life at least as good as our own. Many observers believe that participatory democracy, un dominated by vested interest, is a prerequisite for achieving sustainable aquaculture development (Mintzer, 1992).

Sustainable aquaculture development is development which meets the needs of the present without compromising the ability of future generations to meet their own needs. Some people also believe that the concept of sustainable development should include preserving the environment for other species as well as for people. Sustainable aquaculture development re-

spects the limited capacity of an ecosystem to absorb the impact of human activities.

The aquaculture act includes the promotion of ecologically sustainable development of marine inland aquaculture as an objective of the legislation and requires that the Minister to have regard to and seek to further the objectives of the Act, which are:

· To promote ecologically sustainable development of marine and inland aquaculture
· To maximize benefits to the community from the state's aquaculture resources
· Otherwise to ensure the efficient and effective regulation of the aquaculture industry.

Sustainability has been a main guiding principle for all themes, providing major focus on key issues and interaction between aquatic production, aquatic environment and society.

Importance of sustainable aquaculture development through integrated approach

Aquaculture is currently playing and well continues to play, a big part in boosting global fish production and in meeting rising demand for fishery products. A recent session of the FAO committee on Fisheries (COFI) stressed the increasingly important and complementary role of aquaculture and inland capture fisheries in fish production for human nutrition and poverty alleviation in many rural areas. Aquaculture, in common with all other food production practices, is facing challenges for sustainable development. Most aqua-farmers, like their terrestrial counterparts, are continuously pursuing ways and means of improving their production practices, to make them more efficient and cost-effective. Awareness of potential environmental problems has increased significantly. Efforts are under way to further improve human capacity, resources use and environmental management in aquaculture.

Integrated aquaculture has variety of benefits for farmers in addition to the production of fish for consumption or sale. In traditional, extensive aquaculture, fish can be bred in open waters such as lakes, estuaries or coastal bays, where they feed on naturally available nutrients, or in farm ponds, where they can be fed with by-products from the farm. Traditionally in China, more than five species of carp are bred together to make the best use of feeds and ponds.

Specific issues and challenges for attaining the lasting sustainability of aquaculture are:

· Promotion and definition of research and technology development programs for sustainable aquaculture development.
· Human resource development, capacity building and education, in particular, training, technology transfer and the provision of and access to information.
· Promotion of appropriate and efficient use of resources, including water, sites, feed, seed stock and other inputs.
· Comprehensive policies and supportive legal and institutional frameworks based on communication and consultation with the major stakeholders, the producers and
· Development of investment incentives, market studies, product marketing programs and consumer awareness campaigns.

It is recognized that governments, private sector organizations, public interest groups and individual citizens all have a role to play in achieving sustainable development. Aquaculture in the context of sustainable development incorporates the following elements:

· Maintaining or enhancing the quality of life and the environment for present and future generations
· Adopting an ecosystem approach and respecting the interests and values of all resources users and considering those interests and values in decision-making
· Identifying, planning, developing, operating, harvesting, processing and when necessary disposing of aquacultural products in the most efficient, competitive and environmentally responsible manner, using best practices.
· Respecting constitutionally protected aboriginal and treaty rights
· Creating and sharing knowledge to promote innovation, continuous learning and efficiency
· Securing the participation of stakeholders, individuals and communities in decision making to ensure best use of aquatic space, and making decisions

2. Practical application of ecologically sustainable development

Ecologically sustainable development has been clearly defined and accepted as a guiding framework. However, in practice its application is problematical since its principles can be contradictory, weighted inconsistently and interpreted in widely different ways. Consequently, applica-

tion of the principles of ecologically sustainable development requires clearly defined sustainability objectives, indicators and performance measures. During 2000, a series of ecologically sustainable development objectives specifically relevant to fisheries and aquaculture was developed along with a draft conceptual framework for reporting and assessing performance against these objectives. The core objectives established under the conceptual framework prepared by the Standing committee on Fisheries and Aquaculture and Ministerial council on fisheries are:

· Protection of biodiversity and maintenance of essential ecological processes
· Enhancement of individual and community well-being by following a path of economic development that safeguards the welfare of current and future generations
· Providing effective legal, institutional and economic frameworks for ecologically sustainable aquaculture development.

2.1.Contribution to ecological well-being

2.1.1 Impacts within facility : Individual operations should maintain their impacts within the acceptable levels which take into account background levels and specific catchments issues and limits

2.1.2 Impacts within catchments : The total impact of all aquaculture facilities in each catchments should be kept within the agreed limits, given the assimilative capacity of the catchments and a recognized of impacts already occurring.

2.1. 3 Impacts on the general environment : to manage the impacts of aquaculture such that acceptable impacts occur to functional ecological relationships, habitat and processes.

2.2 Contribution to human well-being:

2.2.1 Indigenous community well-being : To satisfy traditional needs, cultural and economic development ands sustainability of indigenous communities.

2.2.2 Community and national well-being : To contribute to community, regional and national well-being, lifestyle and cultural needs

2.3. Ability to achieve Governance:

To ensure that ecologically sustainable development principles are underpinned by legal, institutional, economic and policy frameworks capable of

responding and taking appropriate peremptory and remedial actions. To allocate the resource to maximize or optimize community benefits

Sustainable aquaculture will contribute significantly to food availability, household food security, income generation, and trade and improved living standards in many developing countries in Asia. In poor and rural communities, aquaculture can be an integral component of development contributing to sustainable livelihoods and enhancing social well-being. Aquaculture is forecast to dominate, if not surpass, the importance of marine capture fisheries in providing high-quality animal protein to lower income groups, employment and export earnings. Growth in aquaculture was not sustained because of several problems, notably environmental degradation: low growth and productivity due to poor fish farmers, and post production facilities and marketing infrastructure, conflict in water use in open water areas among fishing, fish farmers, and other users and lastly, lack of social preparation for community participation and inefficient extension service. The financial crisis further aggravated the accessibility of credit and effectively increased the prices of imported inputs such as feeds and chemicals.

3. Potentials of women in aquaculture development

In most rural communities, there are essential differences between the economic, social and political roles of men and women. This also holds true for fishing communities. While the nature as well as the dimension of these responsibilities may differ from country to country and from community to community, a number of basic features can be identified. Fisheries activities are commonly perceived as men's work. This is also a common phenomenon. However, while there exist difficulties of different magnitude for women to be fully involved in fisheries. Involvement of women in all development initiatives including agriculture is seen as a priority in the national development paradigm. Traditionally, women have played a major role in agriculture; research studies show that besides their regular household work, 43% women are involved in activities, related to agriculture and almost 15% undertake agriculture as their second occupation.

3.1 Pond fishing

In rural Bangladesh, most women spend a major portion of their time doing household work. The type of work a woman has to do make it necessary for her to be close to a pond where she has to wash, bathe, collect drinking water and perform other household tasks. There exists therefore, a natural condition for women to explore the possibilities for fish cultivation. These ponds are also used for vegetable cultivation, ensuring the supply of much needed nutrition for the family. By undertaking pond fisheries activities, women can:

· Contribution to the family income considerably
· Ensure constant supply of much need family nutrition
· Generate an opportunity for self employment
· Uplift their overall socioeconomic condition
· Become more skilled

3.2 Seasonal fishing

Lands adjacent to the homestead remains water logged for three to six months in a year. These lands are situated close to the rural households. Normally, these lands/ ditches remain unutilized. By using a proper method or treatment and cleaning, these fallow lands can be prepared for fish cultivation. Seasonal ponds can be economically profitable, as the land becomes fertile with the homestead organic waste and often their inundation of floodwater. With nominal investment and labor by the family members, these water bodies could be used for fish cultivation. Various types of fish like Puntius sarana. Oreochormis nilotica can be cultivated in these types of water bodies. The investment is affordable and the work does not require much labor. Women therefore can conveniently embark in such ventures.

3.3 Mini Ponds

These types of ponds provide the ideal conditions for fish cultivation for fish cultivation. Ensuring water availability throughout the year would guarantee fish cultivation for the entire year. Women can undertake fish culture in these pond sin the same manner they would cultivate vegetables in and around the plinth of their daily diet and also to meet extra family expenses. Fish culture in the mini ponds does not require extensive technology. This kind of activity in expensive and can be easily managed.

3.4 Shrimp Aquaculture

In coastal area of Bangladesh where shrimp farming is a dominant occupation, women are already actively engaged in many ways. It was found

that almost 85% of the women are engaged in fry collecting as it does not interfere with their day to day household work, and helps supplement the household income. The principal source of fry collecting is from rivers and women's access to rivers is unhindered. Moreover, the work is not time bound and therefore women can do it at their convenience. Women are also actively engaged in various t\kind of work in shrimp farm. In these farms, they do dyke construction and maintenance, liming, harvesting and other farm-related activities. Typical of shrimp aquaculture, women also work in the depots/ factories and in places where the trading takes place. They play an important role at the export level in fish grading, deheading and packaging. It must however be recognized that these services of women are in great demand because of the fact that they are paid much less than men for the same types of work.

3.5 Crab culture

This is another kind of work that women can do close to their homestead. Traditionally, it is often difficult for women to go away from their homestead to work. It was found in a number of studies that the social and familiar life of women who got out for earth cutting work is affected because her absence from home for a long period of time is not socially accepted. If opportunities are created and made available, women can undertake crab culture in the ponds adjacent to their homestead, much like pond fisheries.

3.6 Fish Processing

Women can undertake projects for fish drying using indigenous and available species. The dried fish can be marketed during the lean season to earn good returns on their investment. Besides, they can also buy fish from the trawler and deep-sea fishing boats directly.

3.7 Fishing gears

This is traditionally an area of work done by rural women. They have the required expertise and are aware of the technology best suited to make different kinds of gear.

3.8 Fish feed preparation

In Bangladesh, many women are involved in making prawn / fish feed at

home for their own use. It has also become an important income-generating activity as they can sell the feed to other farmers in the area. This is another example of the kind of work that women can do conveniently at home.

3.9 Socio-economic Aspects

· Participation of women in fish farming activities has increased considerably. At present 43% of the total beneficiaries engaged in pond aquaculture are women and in fact, they do almost all the activities that used to be done by men. The women's groups are practicing test netting, fish harvesting and marketing on their own without any help from others.

· The living standards have improved and the beneficiaries are now sending their children to schools as they can meet the education expenses of their children.

· The program has created a strong feeling among the poor beneficiaries regarding their social and economic status, resulting in strong organizational integrity within the groups. The women's groups in particular , have demonstrated a strong bond unity as well as commitment towards their quest for self-development

· With increased economic power and respect, the group members are now well accepted in society. They are called upon for local arbitration and their views are greatly valued.

4. Human Resources Development (HRD) and Sustainable Aquaculture

Human Resources Development (HRD) refers to further educating and training the personnel from their present status related in aquaculture enterprise and to enhance the awareness of environmental aspects. It is to improve the quality of human resources for doing in perfection with knowing to achieve success or objectivity of any venture like aquaculture. It is the production of valuable human resources through proper policy, guidance and sincerity. The system is to develop fish farming skills efficiency and standard of living by technological development. It educates the personnel ion the technical know how and experiences as well as to target personnel to do the right attitudes to do thing by themselves.

Human Resources Development is an integrated sense encompasses education and training, health care, nutrition, population policies and employment (Muqtada and Hildman, 1993)
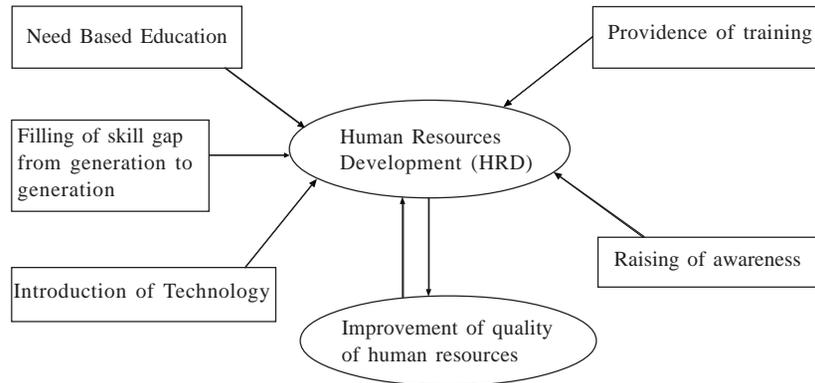
Need Based Education

Providence of training

Filling of skill gap from generation to generation

Human Resources Development (HRD)

Introduction of Technology

Raising of awareness

Improvement of quality of human resources

Fig: 2: Human Resources Development

As sustainable aquaculture in the new millennium sustains a great message that ensures economic and environmental consistency, it is very complex in operation and management. So the developed human resources are useful for ensuring ecologically sound development by formulating magnificent management strategy to minimize adverse effects and to enhance positive effects. Skilled manpower with broad based knowledge and hand on practical experiences in the aquafarming practices to perhaps the most important consideration for ensuring the success of an aquafarm. Successful sustainable aquaculture involves skillful management of the stock and the environment. This calls for the sound knowledge in all ecological engineering and economic aspects. These can be done only by skilled or developed manpower. Experienced and skilled farm operators are instrumental to maintain conditions favorable to the optimum growth and high survival of the cultured species and hence to ensure regular and consistent optimum production to fulfill contractual obligation in supply. As sustainable aquaculture also considers the environmentally sound development, so the personal require an application of special means and methods to manage or save the ecology. Now most nations consider Human resources development (HRD) as a priority area for development of the aquaculture sector.

A recent survey of network of Aquaculture Centers in Asia Pacific (NACA)/ Food and Agricultural Organization of the United Nations (FAO) in Asia revealed that 93% of the countries considered Human resources development (HRD) as a major problem facing aquaculture, and 71% of the na-

tions noted that a lack of skilled personnel was a major impediment to further development (NACA/FAO, 1996). A recent review on aquaculture development in Africa identified eight strategies as pivotal to the development of the sector, and not surprisingly five of these involved Human Resources development (HRD), particularly in relation to small scale farmers and extension workers (Machana and Moehi,2002). On the issue of HRD, it is also important to recognize the specific needs of nations and regions. Past experiences in the aquaculture sector and elsewhere has shown that mere transfer of technologies is not always effective and can even be counter productive.

Although aquaculture offers tremendous socio-economic benefits, it has emerged at a time marked by heightened public awareness of the potential impacts of industrial activity and increased public scrutiny of industry and government actions to mitigate such impacts. While people are interested in realizing the full potential of aquaculture, they are also concerned about issues such as escapes of farmed salmon, food safety, therapetuatnt use, habitat interactions, water quality, organic loading, navigation safety, aquatic animal health, and esthetics. So the skilled manpower is greatly needed to ensure all the above mentioned issues.

All development activity should be economically, socially and environmentally well-compact or consistence or acceptable in term of profit or benefit. There are some central philosophies of the sustainable aquaculture in Bangladesh: "Where there is sustainable aquaculture development, there is optimum output by minimum input: there is no environmental degradation and there is upliftment of socio-economy". The development of the aquaculture sector can be achieved through adopting some important measures which can be ordered as follows:
   a)   Technological development
   b)   Minimum environmental degradation
   c)   Efficient use of primary resources
   d)   Great effort towards meeting human development

Technological development proceed hard in hard with changes in the knowledge gained from day to day experience , skills and outlook of culturist, extension workers , researchers , developers etc; in essence, through all key stakeholders . Role of Human resources development on fisheries and aquaculture sector in the globalize world are expressed by following figure.
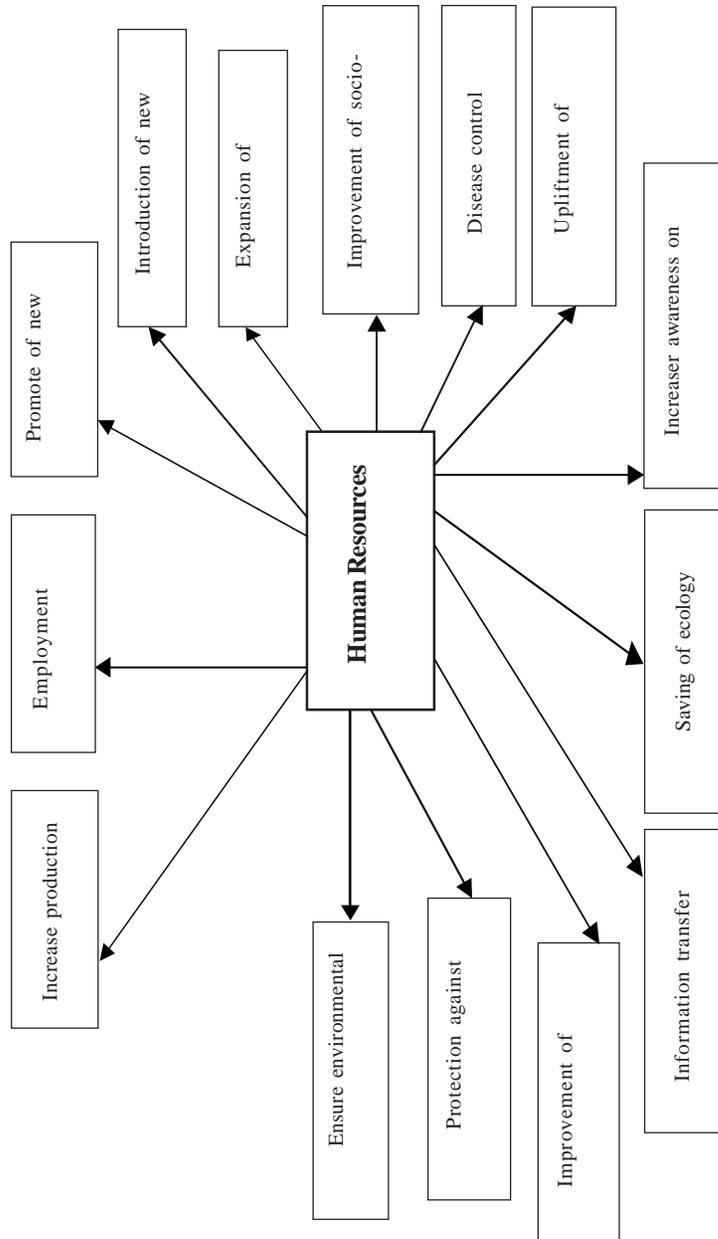
Fig 3: Role of Human Resources Development

Figure boxes: Promote of new · Introduction of new · Expansion of · Improvement of socio- · Disease control · Upliftment of · Increaser awareness on · Employment · Human Resources · Saving of ecology · Increase production · Ensure environmental · Protection against · Improvement of · Information transfer

5. Providence of training to personnel for their development in the new millennium

Sustainable aquaculture demands a good understanding of the physical, chemical and biological processes necessary fro successful production. Being an interdisciplinary science, aquaculture calls fro a blend of expertise from many disciplines. So different types of training are great needed for personnel for going of the venture on par excellence. Based on estimates of manpower requirements it should be possible to determine whether permanents training programs are justified or whether as hoc training programs will be adequate. In the majority of cases, technicians will have to train within the country, with adequate emphasis on the culture system and techniques that are proposed to be adopted.

One after important factor that need to be taken into consideration in HRD is the diverse nature of the aquaculture sector. Currently it is estimated that 150 species are cultured, ranging from invertebrates to reptiles (FAO, 1999) including marine, brackish, and freshwater, temperate and tropical species. Culture practice range from extensive to semi-intensive system and involve the use of pond, raceway, pens and cage etc in open, flow-through and closed system.

Aquaculture is practiced in widely diversified ecological and socio-economic conditions and the handling of the post harvest products also varies considerably. This diversity exacerbates the complexity of providing skill development and knowledge transfer at all levels of enterprise needed. If aquaculture is to develop in a sustainable manner in the new millennium three need to be an increase in research capabilities at the center of emergent aquaculture. So, continuous dependence on training and expertise from temperate and develop regions should be re-evaluated and resources enhanced for within region training where enterprise is based on local aquaculture system.

So, the following points should be considered:
· Training, extension, education, transfer of appropriate technology
· Awareness raising among aqua culturists and general publics
· Improved provision of and access to information
· Special requirements of developing countries and continued need fro

technical and financial assistance
· Formulation of a sub-program on aquaculture development within the inter-regional program in support of the implementation of the code of conduct
· Continued regional cooperation, particularly through strengthen co-operation among regional organizations
· Growing need for technical review and agreement on international standards will require appropriate international forum, for discussion and consensus building.

6. Importance of Technical Assistanc

Technical Assistance will help to contribute to the poverty reduction and food security goal of the government and protect the environment in inland and coastal water areas. The Technical Assistance (TA) will help the government prepare an investment project for the sustainable development and management of aquaculture though
· Increased fish production and products
· Improved employment, income and nutrition of poor fish farmers and coastal communities
· Adaptation of environmental sustainable technologies

The TA will assess the status of aquaculture development in the country , identity major problems, opportunities and strategies to achieve sustainable growth and reduce poverty . The TA will use the participatory and consultative approach as a basic strategy and techniques such as surveys, questionnaires and focus group discussions to collect baseline data and develop protocols for monitoring and evaluation. A participatory livelihood assessment will be carried out to determine the activities of men, women and the poor to enable participation and ensure more focused targeting of benefits. The TA will formulate and investment project, which is envisaged to have the following components:
· Empowerment of fisher folk communities
· Rehabilitation and improvement of management systems for traditionally cultured freshwater species such as carp, tilapia and cat fish; and development of technologies for other high value species such as eels and turtles.
· Rehabilitation and improvement of management systems for traditionally

· Cultured brackish water and marine species-groupers, sea bass, prawns, milkfish, aquarium fish, seaweeds and shell fish – and development of technologies for new species such as seas horses , wrasses, etc; and
· Institutional strengthening and development support services.

7. Human Resources Training and Development

Training for personnel involved in the care and use of animals for scientific purposes including researchers, teachers and technical support staff.

7.1 Training of aquaculturists

The aquaculturists would need to have a fairly high educational background generally up to the university or equivalent level. He should be given specialized theoretical and practical training in all the basic disciplines involved in aquaculture work at the post graduate level. The high level training is necessary as he as to guide and participate in all technical aspects of an aquaculture program.

7.2 Training of technicians

The technician, who is equivalent of a foreman in a factory, should received specialized training with greater stress on practical work. Much greater restriction of the scope of training and specialization in particular culture system or techniques of culture, e.g. fish, shrimp and oyster culture and hatchery operation, feed preparation, pond management etc will be possible and indeed desirable.

7.3 Training of extension workers

Its objectives, characteristics, philosophy and principles; its role in transfer of technology to farmers; extension a s apart of integrated rural development programs.

Objectives of aquaculture extension as part of the general program of socio-economic uplift of farmers. Promotion of aquaculture as an industry and attainment of improved production through:
· Transfer of technology – site survey, design of installations, farm

construction, culture techniques, pond maintenance, disease diagnosis, quality control, etc.

· Linkages with support services: ensuring supply of quality seed, fertilizers, chemicals and drugs, fabrication and supply of farm requirements like monks, cages, rafts, clutches, etc.

· Linkages with credit facilities: arranging credit and ensuring its proper utilization; short term and long term loans; financing agencies

· Organization of marketing and distribution systems and cooperatives trading facilities; product development , consumer education and demonstration marketing

· Training of farmers in aquaculture techniques

c.1. Extension methods

Some extension methods applied for the better aquaculture practices through:

· Results of demonstrations, demonstration farming etc.

· Communication pf useful research results through bulletins, pamphlets, handouts, newspaper articles etc

· Radio and television talks

c.2. Extension tools

Transport, water analysis and field study kits, some common chemicals for control of infections and mortality of fish, film strips, slides, posters, projection , equipment , demonstration farms etc.

d. Role of cooperatives in extension programme

d.1. Organization, execution and evaluation of extension programmes

Nature and importance of extension programmes building; socio-economic survey to decide on the most suitable type of extension programme; formulation of objectives; procedure for developing sound extension programmes; roles and responsibilities of different categories o9f extension workers, rural leaders, government institution, etc.; formulation and execution of work plan; evaluation in extension – purpose ; types; internal evaluation techniques ; analysis and interpretation.

d.2. Extension supervision and administration

Function of extension workers at various levels, qualities required of good extension supervisor; inter-relations of extension supervisors with other extension and research personnel; administrative organization of extension service ; principles of effective budgeting ; promotion of adult education in rural areas as an essential adjunct to aquaculture extension

d.3 Extension training

Training of technicians and farmers, short and long –term courses, specialized training of technicians to suit local needs, organization of periodic refresher training courses of extension personnel. Handing and operation of extension tools, preparation of extension aids (like lantern slides, posters, film strips, etc.) , visits to private aquaculture farms for rendering technical assistance , participation in organized field days.

The role of extension worker is to constantly enrich themselves with such new technical information, test it's and spread to the fisherman. An extension worker usually performs various roles as a n adviser, a teacher, an organism, a co-worker, a liaison officer, a friend and a sympathizer in the group he works with. Extension worker bring to fisherman useful information that can help how to increase his yield and profitability. He will bed additional training in extension techniques, such as method and result demonstration, farm visits, farmers training, use of audio-visual aids etc.

e) Training for other personnel

The farmer may benefit by short-term courses in specific techniques, especially when improvement or innovation have to be introduced. Scientific personnel for basic and applied research as well as specialist service such as diagnosis and treatment of disease should processes university level education with specialization in selected filed.

Well equipped research institution can provide appropriate training facilities for scientific personnel. On the job training of the candidate wit the basic qualification may generally be the most practical way of training such personnel. One common factor operating at all levels of human re-

sources development (HRD) is the sharing and effective dissemination of information. He has to be trained to be excellent techniques whose technical knowledge and ability will be recognized and appreciated by the farmers and a t the same time have the ability of wining their friendship and confidence.

Role of educational institutions, GOs, NGOs, donor agencies and other private sector

Actually, prior to do any culture, research, experiment or massive work, financial and technical supports are obvious . so, in order to provide those basic needs of this sector the various institutions can play a vital role. These should have some rules and regulation as well. Developed human resources should be properly utilized by the above mentioned organizations. The whole development of any sector depends upon its grassroots level. If all the advanced steps are gathered as a holistic approach the real advancement may occur. The financial as well as every technical support should be sufficiently provided by those institutions . Micro-credit loan in the form of co-operative society is so much effective in the folk-society. Beside this, to enrich the national economy government should think more about these sectors. That's why a well managed , developed and need based plan must be done to involve these institutions in aquaculture sector. Only proper co-operations among them can ensure the whole development of this sector. Generally the GOs, NGOs and donor agencies are involved in aquaculture development in Bangladesh which is a good sign, but it should be enriched. At present in Bangladesh many banks and government research centers are helping by some opportunities. Many NGOs and donor agencies (Danida, DFID, FAO, ADB, UNDP) are involved in the development of aquaculture. These institutions are providing various extension services in the coastal areas of Bangladesh for the development of sustainable aquaculture.

New approaches for Human resources Development for Sustainable Aquaculture

Aquaculture Extension services have gained much importance wit the increasing reliance's of aquaculture. Existing culture techniques or technology developed in one locality may need modification and refinement to adapt to the local conditions of different geo-political environment. Train-

ing of extension workers has to be modified to incorporate and reinforce information delivery methods and mechanisms as well as practical farming techniques. There is also a need for greater interaction between extension trainers and farmers during training. Furthermore, the route of the extension training should be exceeding the traditional models of the past. New models and players in extension are needed media, farmers association, development non-governmental organizations (NGOs), private sector suppliers and other will likely come into more prominence, broadening training experiences.

The new approaches are

- Increasing co-operation among extension training providers including Govt., NGOs and the private sector
- Participation of farmers in extension project planning , development and orientation of precise farming technologies
- To make further bridge for the moving of research findings to extension workers and then to farmers
- Increment of researcher in term of quality and quantity
- Growing of awareness / consciousness of all personnel for the saving of ecology being eco-friend in doing the aquaculture venture.
- Development of research capabilities and gear the research to meet the ever increasing need and challenges imposed on the sector
- Providence and further incentives to the researchers, farmers and other personnel for their further improvement
- The great role should be played by donor agencies by their fund dedication to Human Resources Development (HRD)
- More application and extension services to the farmers
- More training to the farmers
- Conduct training courses in culture techniques and general biology of aquaculture species
- Provide extension support to private aquaculturists and government fisheries and aquaculture staff to develop commercial and subsistence aquaculture crops within the region
- Help develop and support hatcheries and grow out farms for giant clams, sponges and other species as requested by local authorities
- Assist in reef reseeding programs and surveys for giant clams, sponges and other species as requested by local authorities
- Develop extension fact sheet, manuals and videos to educate existing

and potential aquaculture producers in the region

·   Conduct or organize general aquaculture information sessions and workshops on established and potential aquaculture species

·   Provides aquaculture information in the form of papers , manuals and videos for producers , government representatives and interested parties throughout the region upon request

·   Integrate the principals of sustainable aquaculture development by policy makers into country policies and programs and reverse the loss of environmental resources

Conclusions

Human Resources Development (HRD) can be of definite help in achieving optimum objectivity , efficiency and reliability of sustainable aquaculture on a long term basis in the new millennium for Bangladesh. It may minimize the uncertainty, confusion and practical hazards and ensure the economic viability and helps aquaculture to go an par excellence. So, development of human resources through training, eduation and awareness growing in the summons of the sustainability aquaculture in the new millennium.

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Applications of Decision Support System (DSS) by Business Executives: A Study in Khulna City

Md. Khashrul Alam*
S. M. Towhidur Rahman**
Shamsun Nahar***

Abstract

The study attempts to explore the level of DSS application by business executives. DSS can be viewed as a computer based system that supports managers and business professionals in decision-making process. The study reveals that the present status of DSS applications by the business professionals is not up to the mark. Executives use Microsoft Excel as a tool for decisions making. The survey finds that all most all of the executives have some knowledge regarding computers like computer application in business, business information systems or management information systems. It also finds that lack of knowledge; difficulty to build appropriate models and training are the main reasons of not using DSS. The major uses of DSS are confined to data aggregation and simple calculations. A small number of executives use DSS to solve out quantitative techniques or to develop model.

Key Words: Data mining; Semi Structured; Unstructured; DSS, GDSS

1. Intoduction
Business professionals have to take decisions in their day-to-day activities. They take both quantitative and qualitative decisions frequently. The nature of decisions includes structured semi structured and unstructured. DSS can help to enhance any of that nature of decisions. Decision sup-

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*   **Assistant Professor, Business Administration Discipline, Khulna University, Email: khashru74@yahoo.co.in**

** **S. M. Towhidur Rahman, Assistant Professor, Business Administration Discipline, Khulna University, Email: towhid_ku_97@yahoo.com; towhid@ku.ac.bd**

*** **Shamsun Nahar, Lecturer, Business Administration Discipline, Khulna University, Email: shajjudu@yahoo.com**

port system can also play an important role to enrich decision quality. Decision support systems are computer technology solutions that are used to complex decision-making and problem solving (Shim and et al, 2002). Most business fails to achieve the target because of poor quality of decisions. Business executives in developing nations are using DSS in their daily activities successfully. At the same time they are getting so much benefits in their decision making process. But level of DSS uses in underdeveloped countries is not known exactly. With a view to know the status of DSS uses in a country like Bangladesh, we decided to conduct a study in Khulna city to find out the extent of DSS applications by the business executives. That definitely sheds light on the status of the development our business society in the area of decision making using technology.

1. Objectives of the study

To know the level of DSS use
To understand the knowledge of DSS among the executives
To understand the problems faced by the executives while using DSS

1.2. Development of the DSS concept

The original DSS concept was most clearly defined by Gorry and Scott Morton ,who integrated Anthony's categories of management activity and Simon's description of decision types. Anthony described management activities as consisting of strategic planning (executive decisions regarding overall mission and goals), management control (middle management guiding the organization to goals), and operational control (first line supervisors directing specific tasks). Simon described decision problems as existing on a continuum from programmed (routine, repetitive, well structured, easily solved) to non programmed (new, novel, ill-structured, difficult to solve). Gorry and Scott Morton combined Anthony's management activities and Simon's description of decisions, using the terms structured, unstructured, and semi-structured, rather than programmed and non programmed. They also used Simon's Intelligence, Design, and Choice description of the decision-making process. In this framework, intelligence is comprised of the search for problems, design involves the development of alternatives, and choice consists of analyzing the alternatives and choosing one for implementation.
A DSS was defined as a computer system that deals with a problem where at least some stage was semi-structured or unstructured. A com-

puter system could be developed to deal with the structured portion of a DSS problem, but the judgment of the decision-maker was brought to bear on the unstructured part, hence constituting a human– machine, problem-solving system. Gorry and Scott Morton also argued that characteristics of both information needs and models differ in a DSS environment. The ill-defined nature of information needs in DSS situations leads to the requirement for different kinds of database systems than those for operational environments. Relational databases and flexible query languages are needed. Similarly, the ill-structured nature of the decision process implied the need for flexible modeling environments, such as those in spreadsheet packages. Fig. 1 describes what probably came to be a more customarily used model of the decision-making process in a DSS environment. Here, the emphasis came to be on model development and problem analysis. Once the problem is recognized, it is defined in terms that facilitate the creation of models. Alternative solutions are created, and models are then developed to analyze the various alternatives. The choice is then made and implemented consistent with Simon's description. Of course, no decision process is this clear-cut in an ill structured situation. Typically, the phases overlap and blend together, with frequent looping back to earlier stages as more is learned about the problem, as solutions fail, and so forth. Over the last two decades or so, DSS research has evolved to include several additional concepts and views. Beginning in about 1985, group decision support systems (GDSS), or just group support systems (GSS), evolved to provide brainstorming, idea evaluation, and communications facilities to support team problem solving (Gory & Scott, 2002). A typical DSS must meet three criteria (Liang & Hung, 1997):

(1) Support but not replace decision makers;
(2) Tackle semi-structured decision problems; and
(3) Focus on decision effectiveness, not efficiency

While it is expected that a DSS will improve decision quality, prior research indicates that the effect of DSS use on managerial decision performance is still uncertain. In some instances decision performance improved, while in others there is no effect. This is not entirely unexpected since there are multiple variables, issues and context that interact when we set out to assess DSS use (Kanungo & et al, 2001).
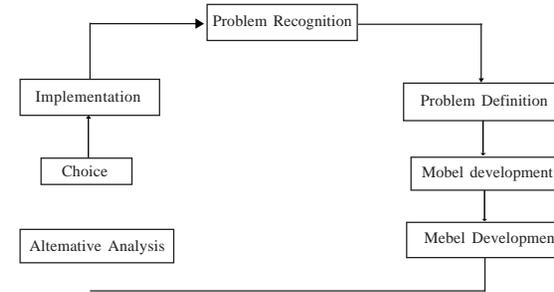
Figure 1: The DSS decision making process

1.3. The component of DSS:

The main components of the DSS are the DSS data base, the DSS software system, and the user interface DSS database is a collection of current or historical data from a number of applications or groups. The database may be small database residing on a PC or massive data warehouse. The DSS software system contains the software tools that are used for data analysis. It may contain various OLAP tools, data mining tools or a collection of mathematical and analytical models. Figure below shows the major components of DSS
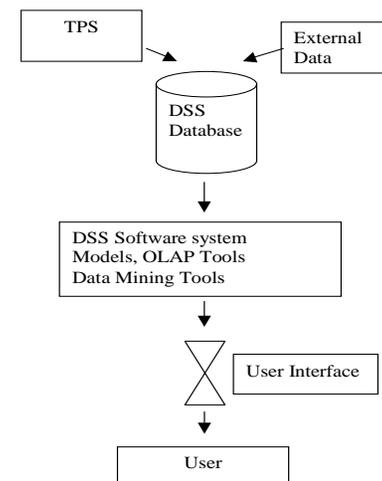
Figure 3: Components of DSS

The DSS user interface permits easy interaction between users of the system and the DSS software tools. A graphic, easy to use, flexible user interface supports the dialogue between the user and the DSS (Laudon, 2006).

. Methodology

Both primary and secondary sources are used to collect data. Structured questionnaire are given to the respondents. Some questions are open ended while some are close-ended. 120 respondents are surveyed to gather the information. Convenience sampling technique is used to collect the data from the respondents. Respondents are from different sectors of business like banks, pharmaceuticals, mobile operators and so on. The chart below shows demographic pattern of the respondents. Respondent's positions range from entry level to mid level. Different journals, texts and various electronic search engines are also used to conduct the study. We use simple statistical tools to analyze the data.
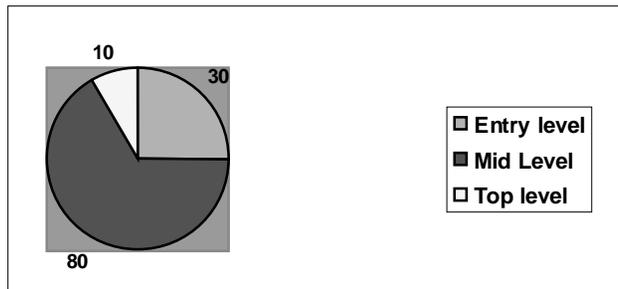

Figure 2: Respondents' characteristics

5. Findings & discussion

5.1. Level of DSS Knowledge

Proper knowledge is essential for manipulating any thing in an efficient manner. Respondents were asked whether they have got any formal knowledge in computer application in business, management information system, business information system or any other subjects related to computer information system. The result shows in the below, that large number of executives have got formal education in computer application in business.

Table 1: levels of knowledge about DSS

Completed MIS	Computer Application in business	Programming language	Others
26	62	24	08

5.2. DSS Tools used by the executives and the frequency of use

There are so many DSS soft wares' like MS excel, Lotus 123, Corel Quattro, LINDO, and SPSS. Out of those decision support tools, most users use Ms excel for analyzing business problems. At the same time it is found that all most all of the respondents are not well aware of the available alternative DSS tools. While asking about the frequency of DSS use the respondents give a mix reply.
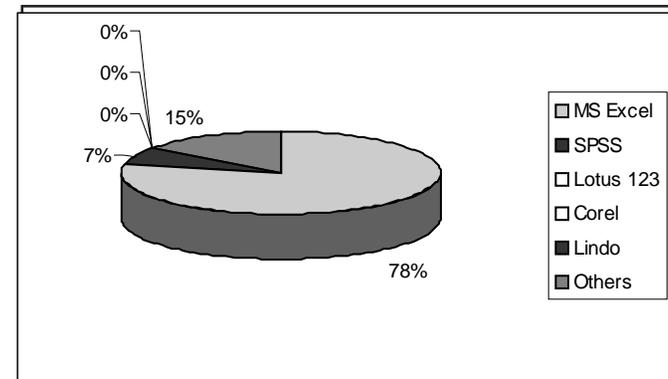

Figure 4: Response regarding DSS use

Some of them use DSS frequently while some other use it occasionally. The table below shows the exact picture of DSS use by the executives.

Table 2: Usage frequency of DSS

Frequency of DSS use	Total respondents	Percentage
Daily	44	37
Occasionally	42	35
Seldom	34	28

5.3. Model building and DSS

Model is the abstraction of reality. It represents real thing in a simplified version. Models can be of many types like schematic, physicals and mathematical. Business executives need to build model before taking decisions. Models are popular among manger because of many reasons such as, convenient to manipulate, less expensive, consistent tool for evaluation and provide standardized format for analyzing problems (Stevenson, 2006).

Business professionals can develop number of models such as what if analyses, scenario analyses, optimization, goal seek analysis, mathematical models etc. In what if analysis, user makes changes to variables, or relationships among variables, and observes resulting changes in the values of other variables. Sensitivity analysis is a special case of what if analysis. Typically, the value of only one variable is changed repeatedly and the resulting changes on other variables are observed. Goal seek analysis reverse the direction of the analysis done in what if and sensitivity analysis. In optimization analysis goal is to find the optimum value for one or more target variables, given certain constraints (Brien, 2004).

The survey found that most executives are not well aware of the above models. Large number of executives uses only data aggregation models in their work place. The figure below shows the level of model building capacities of the executives
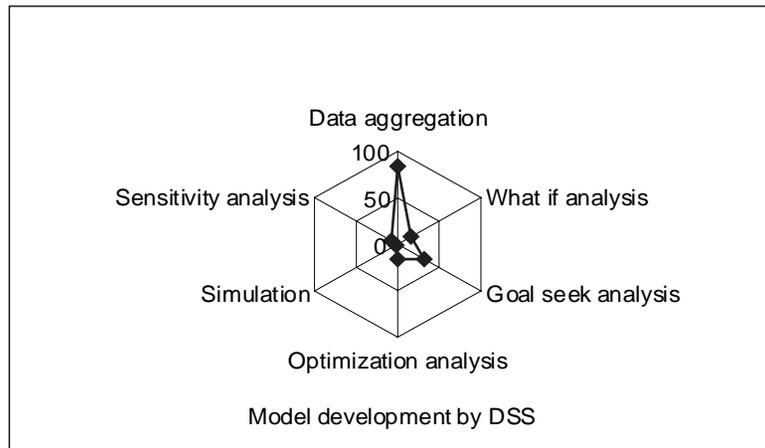

Figure 5: level of model building capacities.

5.4. Problems in adopting DSS

Application of DSS in business scenarios demands user's knowledge, top management supports, opportunities to develop model and a congenial environment. Employees should have the mentality to accept DSS as a tool for enhancing decision-making capacity. Respondents were asked about the problems in adopting DSS by 5 points scale ranges from strongly agree to strongly disagree. A weight is given to each option such as, for strongly agree 2 and strongly disagree -2 and neither agree nor disagree 0.Then the total weighted score is calculated by multiplying each score with the respective weight. The chart below shows the results. The highest score tells that user consider as the biggest problem in adopting DSS and vice versa (See Appendix- Table 3-A and 3-B). The survey finds that most users face difficulty in developing model while they consider lack of top management is not a problem at all in adopting DSS.
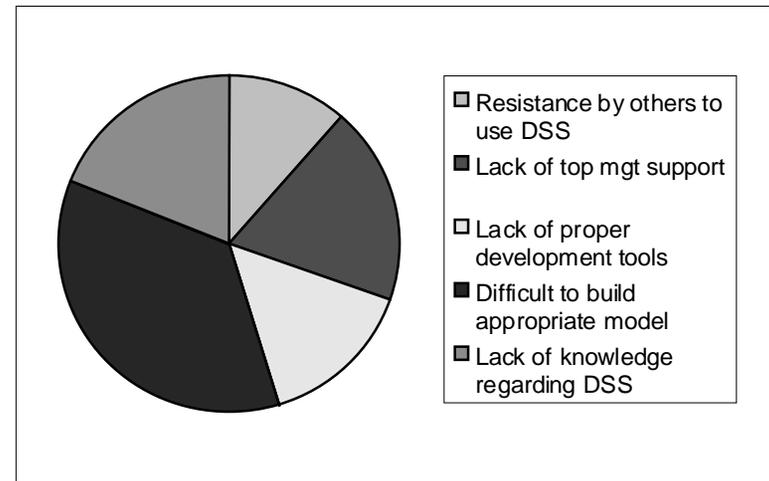

Figure 6: Problems in adopting DSS

6. Conclusion

Information system is one of the most important integral parts of business. Different types of information system are essential to support major business functions. Today's business is agile in nature and demands prompt decisions. DSS is such a tool that accelerates the pace of decision-mak-

ing. As for example to do what if or optimization analysis manually, it will take hours after hours but with the help DSS it will take only a few minutes. Survey finds that business executives are using DSS to some extent. They are using it for different purposes like developing model, doing some mathematical calculation. The respondents also have some limitations such as, lack of knowledge regarding information system, meager knowledge in different types of model and difficulty in building model. Above all training and professional knowledge regarding computer application in business can overcome those limitations. The survey findings have also some limitations because it is done only in Khulna city. More accurate result would be derived if it were conducted in all major cities in Bangladesh.

Appendix

Table 3(A): Responses regarding problems in adopting DSS

Weight Factors	2 Strongly Agree	1 Agree	0 Neither agree nor Disagree	-1 Disagree	-2 Strongly Disagree	Total weighted score
Resistance by others to use DSS	20	42	14	18	26	12
Lack op top mgt support	8	44	20	16	32	-18
Lack of proper development tools	18	46	12	22	22	16
Difficult to build appropriate models	12	66	8	16	18	18
Lack of knowledge	10	56	14	24	16	20

Table 3(B): Problems in adopting DSS

Factors	Calculation	Result
Resistance by others to use DSS	20*2+42*1+14*0+18*-1+26*-2	12
Lack of top mgt support	8*2+44*1+20*0+16*-1 +32*-2	-20
Lack of proper development tools	18*2+46*1+12*0+22*-1+22*-2	16
Difficult to build appropriate model	12*2+66*1+8*0+16*-1+18*-2	38
Lack of knowledge regarding DSS	10*2+56*1+14*0+24*-1+16*-2	20

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United Kingdom University Education and Expansion: An Overview

Jashim Uddin Ahmed*

Abstract

The primary focus of this article is on the historical development of the universities in the United Kingdom. This article provides the context of the literature review and a brief history of universities in the United Kingdom, and then progresses to explain different issues such as purpose of universities, higher education and religion, growth of universities and academic expansions.

Introduction

Education can be viewed as the transmission of the values and accumulated knowledge of a society. In wider context, western education as a means of necessary scientific 'development', others have analysed the educational process from a more 'postmodern', relativist perspective, rejecting all forms of 'totalising reason, or grand theory', especially originating from the West (Welch and Masemann, 1997). Lane (176, p. 1, quoted in Kelly, 1991, p. 7) defined education as 'the transmission of wisdom, knowledge, experience and skills'. In this sense, it is equivalent to what social scientists term socialisation or enculturation. As societies grow more complex, however, the quality of knowledge to be conveyed from one generation to the next, becomes more than any one person can know; and hence there must evolve more selective and efficient means of cultural transmission (Adeyemi and Adeyinka, 2002). In a recent study, Adeyinka (2000, pp. 19-20) defined education as 'the process of transmitting the culture of a society from one generation to the other, the process by which the adult members of a society bring up the younger ones'. The growth of information and knowledge has been phenomenal, and such a volume of information becomes increasingly difficult to retain

and pass on to future generations. The development of writing, printing and crafts became a means of classifying and ordering information so that it could be passed on to others. Experts or scholars in a particular field would often meet or live in community to exchange ideas and develop their understanding of the world around them. These loose communities often had a religious focus that provided the stimulus to expand the knowledge and document the results. Education is the idea of freedom of selection and lays emphasis on an unquestioned acceptance of a ready-made set of dogmas such as the political dogmas in a totalitarian state (such as Prussia under Joseph II or Russia under Catherine the Great) or the religious doctrines of some Christian Churches or Muslim societies (Adeyemi and Adeyinka, 2002). In Europe, Christians of the first century came from the upper levels of society and were acquainted with the philosophy and natural science of their time (New Encyclopaedia Britannia, 1995). According to the New Encyclopaedia Britannia (1995, p. 346):

> In medieval Scholasticism, the elevation of Christian belief to the status of scientific universal knowledge was dominant. Theology became the instructor of the different sciences, organized according to the traditional classification of trivium (grammar, rhetoric, and dialectic) and quadrivium (music, arithmetic, geometry, and astronomy) and incorporated into the system of education as "servants of theology". This system of education became part of the structure of the universities…. .

This was Christianity with a cathedral or abbey providing the organisational unit in which the scholars both lived and worked. The seclusion of such scholars, usually monks, on religious grounds, often allowed them to spend more time thinking when compared with the general population.

The origin of university education lies in the medieval period, and this raises major issues concerning the role of university education (Kivinen and Kaipainen, 2002). If we look at this from the perspective of learners' generic needs for conditions that will foster a positive learning experience, perhaps the most important thing which learners want from higher education institutions is "access to authentic communities of learning, interpretation, exploration, and knowledge creation" (Brown and Duguid, 2000, p.232).

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* **Assistant Professor and Associate Director, School of Business, North South University, Dhaka, Bangladesh.**

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The Origin of the University

The organisation of a university is fundamentally that of a community of scholars. In fact, the very word university - in medieval Latin universitas - meant simply, community (Graves, 1988). Indeed, to make sense, the word had to be modified in order that its meaning would be clear, as universitas magistrorum et scholarium means community of pupils and scholars (Livingstone, 1974). The original concept of a university was that of a studium generale, or 'School of Universal Learning' which came to mean a school where there were organised facilities for study in order to attract students from a wider community than merely the immediate locality. As Newman defined university is a place for the communication and circulation of thought, by means of personal intercourse, through a wide extent of country. On the other hand, Smith and Webster (1999, p. 39) suggest that:

> the university is, has been and can only be a place where thinking is a shared process, where the teaching is part of the unending dialogism of the outer society, 'where thought takes place beside thought'.

As Donaldson (2002, p. 96) has noted in his recent work, 'Education is a core mission of all universities'. The university, as we know it today, is a medieval invention, if by 'university' we mean a corporation of people engaged professionally in the discovery of knowledge on the one hand - research; and in the dissemination of knowledge - teaching, on the other hand (Greenwood and Levin, 2001; Kast and Rosenzweig, 1974; Kogan and Kogan, 1983; Muller and Subotzky, 2001; Rowley, 2000). The traditional role of universities in defining and valuing knowledge is less clear. In many fields, new knowledge is created in commercial and industrial settings, and the right of the academic world to validate knowledge has come under challenge, politically from external forces, and philosophically from within the academic world itself (Patterson, 1999; Wills, 1998).

Most of the universities throughout Europe today can trace their ancestry to a few universities established toward the end of the 12th and 13th century (Mayor, 1992). In Italy, the University of Bologna was founded in 1088. The first Spanish university organisation was a royal foundation of Alfonso IX of Lon in 1212, but the first to become permanent was the University of Salamanca founded about 1220. This was followed by others with Germany coming into the field later. The first German university was not, strictly speaking, in Germany; it was at Prague, founded by the Emperor Charles IV in 1348. After Prague, Vienna was founded in 1365. Heidelberg (1386), Cologne (1388) and Erfurt (1392) date from the late medieval German Empire. In next century other universities followed in the north and south of the German dominions. In the lesser countries of Europe, Cracow dates from 1364; Hungary had two in the fifteenth century; Upsala and Copenhagen both date from the second half of that century. University of Upsala (1477) was to be modelled on that of Bologna and to include the faculties of theology, cannon and civil law, medicine and Philosophy. University of Copenhagen (1479) is a centre of Roman Catholic theological learning but also has faculties of law, medicine and philosophy. However, these medieval universities had no buildings of their own and borrowed neighbouring churches (Graves, 1988; Lawson and Silver, 1973).

As early as the end of the 15th century it became clear that Oxford and Cambridge were to be England's sole heritage from the European medieval movement (see Kast and Rosenzweig, 1974). Being creatures of Church and State, they had been pulled first this way and then another, as their patrons changed with regularity, often losing freedom over selection of students, curricular ideas and staff. The traditional constitution of the English universities was, in its origin, an imitation of the Parisian, modified by the absence of the cathedral chancellor. The monks practised the art of reading and writing. All books or manuscripts were hand-written and lavishly illustrated; particularly the bible and other religious texts (see Kast and Rosenzweig, 1974). The Church of England was accustomed to view education as an Anglican monopoly in theory, with dissent a de facto but not de jure competitor, and purely secular education an abomination (Graves, 1988). Newman's ninth discourse, 'Duties of the Church Towards Knowledge', draws upon the accumulated memory shared by the university and the church. His theories on university education are set out in The Idea of a University, which has a contemporary interest (Barnard, 1969). As Barnard (1969, p. 120) advocates, 'Newman has in mind the Platonic idea, and his search is for an academic Republic. To him all knowledge is one; and as man's most fundamental relationship is to God, so theology is the most 'architectonic' of the sciences - the basis of all true education'. According to Mayor (1992, p. 8):

In the universality of their outlook, they shared in the vast heritage of Greek and Roman civilization, drew inspiration from Christianity, and used Latin as the medium of communication.

Higher education was equally bedevilled and yet encouraged. Similar to the question of religious instruction and control in schools, university tests were a national battleground. Under the circumstances, there were demands both for the opening of old institutions and for the creation of new ones, which would offer new subjects and admit new people.

Purpose of Universities

About two thousand years before, Aristotle (384-322 BC) was seeking to discover the exact purpose of the education of his age. Was it to produce learned men, to educate in virtue, or to satisfy the material needs of society? Day (1994, p. 77) defined the purpose of the university as:

> testing and improving the quality of knowledge; developing knowledge further; using combination and confrontation as tools. The classical role of the university is both to bring cohesion to scholarship and to stimulate creativity.

This use of a new term of Greek origin, 'Academia', known as early as the 15th century, is symbolic for yet another reason: it points directly to what we should now call a change of academic paradigm, for it shows that historical philology was being used as a new means of apprehending scientific truth. This paradigm was not, however, predominant throughout the early modern period. Philology had to give way to the exact sciences, and, of these, mathematics was the universal touchstone of the 17th century. As Buisseret (1987, p.10) noted:

> Before the mid-nineteenth century, English universities basically provided a classical liberal education for gentleman. There was widespread opposition to the idea that a university education should be geared towards a particular vocation, and certainly not towards a vocation in industry. Furthermore, for a long time in the Industrial Revolution, most professional engineers were trained within industry, which remained suspicious of academia.

However, there was another aspect of the debate about the purpose of universities which was of great significance in those years and that was

the place of research. Many commentators described the university as knowledge 'producer and transfer of knowledge' (Delanty, 2001, p. 151; see also, Gibbons, 1998b; Gibbons et al., 1994; Greenwood and Levin, 2001; Stevens and Bagby, 2001) in 'a community of scholars and students engaged in the task of seeking truth' (Jaspers, 1965, p. 19). Moses (1985, p. 73) asserts the traditional view of the university:

> as a community of scholars and students, with everything else subservient to that concept. There are certainly people on the academic staffs of universities who continue to hold that view, and who hold it very strongly indeed.

Similarly, Mayor (1992, p. 8) asserts,

> in the context of rapid economic and social change, the universities have been themselves increasingly called upon to place their knowledge at the disposal of the community by assuming more pragmatic functions.

In higher education systems knowledge is discovered, conserved, refined, transmitted and applied (Clark, 1983; 84). As Blunkett addressed in THES (2001), 'Universities and colleges are powerful drivers of innovation and change …'. Vught (1989, p. 51) suggests, '[if] there is anything fundamental to systems of higher education, it is this handling of knowledge. The primacy of the handling of knowledge is related to some other fundamental characteristics, which can be found within higher education institutions'. Wall (in THES, 2002) expressed by the equation 'HE = knowledge + skills', where knowledge and skills are assigned an economically instrumentalist interpretation and value, which is major part of the knowledge economy. Similarly, Gibbons et al. advise that higher education must prepare a future generation of 'knowledge producers' to 'travel fast' from one research project to the next, which means researchers 'must travel light, in skills as well as attitudes' (Gibbons et al., 1994, p. 75). Gibbons (1998a) identifies a 'dynamics of relevance' for higher education and defines it explicitly in terms of orienting towards these changes in knowledge production. The high-minded Humboldtian pursuit of knowledge for its own sake has been supplanted by the view that universities 'are meant to serve society, primarily by supporting the economy and promoting the quality of life of its citizens' (Gibbons, 1998a, p. 1). As Greenwood and Levin (2001, p. 433) assert:

We believe that universities can make a valuable contribution to society based on the critical and reflective knowledge that systematic research techniques bring forward. Universities are among the very few designated centres of knowledge generation and transfer in our society and have amassed immense resources in libraries, equipment, and faculty. Thus, they have an important role to play.

The traditional philosophy at Oxford and Cambridge, as 'consensus-oriented organisations' (Palfreyman, 1998, p. 132) emphasised the importance of teaching and of close tutor-student relationships. This philosophy was adopted by the fledgling civic colleges. The most fundamental implication of Newman's (1987, first published 1853) definition of the university as 'a place of teaching universal knowledge' was, as he himself said on offering the analysis, 'that its object is …. intellectual, not moral'. Newman argued that teaching and learning in a traditional university involved three equal contributions: self-learning, learning from student peers, and teaching by the masters. Bourner and Flowers (1997, p. 82) noted, 'Universities have two core processes: teaching and research. The output of teaching is learning and output of research is a contribution to knowledge'.

This is not to deny that the universities were not also engaged in the pursuit of knowledge for its own sake, knowledge that was not related to economic growth or industrial advancement.

The Growth of Universities

The early ancient English and Scottish universities were connected very closely with the church (Mayor, 1992). The University of Paris that was formed some time between 1150 and 1170 became the model for French universities north of the Loire and for those of central Europe and England. Although both Oxford and Cambridge were modelled on University of Paris, their higher faculties never developed the same distinct organisation, and, while the two proctors at Cambridge originally represented north and south, the nations are scarcely to be discerned. But the feature that most served to give permanence and cohesion to the entire community at Cambridge was, as at Oxford, the institution of colleges. By 1200, Cambridge was a thriving commercial community which was also a county town and had at least one school of some distinction. Then, in 1209, scholars taking refuge from hostile townsmen in Oxford mi-

grated to Cambridge and settled there (Graves, 1988). They were numerous enough by 1226 to have set up an organisation, represented by an official called a Chancellor, and seemed to have arranged regular courses of study, taught by their own members. King Henry III took them under his protection as early as 1231 and arranged for them to be sheltered from exploitation by their landlords. At the same time, he tried to ensure that they had a monopoly of teaching, by an order that only those enrolled under the tuition of a recognised master were to be allowed to remain in the town. The earliest College was Peterhouse, founded in 1284 by Hugh Balsham, Bishop of Ely. King's Hall, 1317, was intended by its founder, Edward II, to provide recruits to the higher civil service. Michaelhouse (1324), Clare (1326), Pembroke (1347), Gonville and Caius College (1348), Christ's (1437), Queens' (1448), Trinity Hall (1350), Corpus Christi (1352), King's, St Catharine's (1473), and Jesus (1496) followed in the next two centuries. Five late foundations, St John's (1511), Magdalene (1542), Trinity (1546), Emmanuel (1584), Sidney Sussex (1596) emerged from the dissolution of small religious oriented houses and, like the King's Hall, provided for younger scholars as well as 'post-graduates'.

At the University of Oxford, Blackfriars was established in 1221. Blackfriars is the Dominican academic community in the University of Oxford, where the friars first arrived in 1221. The Hall, which occupies part of the Dominican Priory, brings together a small and friendly group of men and women concerned with the common study of Theology and Philosophy. The earliest College was Balliol, founded in 1263; this was followed by Merton (1264), St. Edmund Hall (1278), Hertford (1282), Exeter (1314), Oriel (1326), Queen's (1341), New College (1379), Lincoln (1427), All Souls (1438), Magdalen (1458), Brasenose (1509), Corpus Christi (1517), Christ Church (1546), Trinity (1554-55), St John's (1555) and Jesus (1571).

Civic Colleges Toward University

By the 19th century, the pressure of industrial expansion was turning voluntary experiments into official institutions. University College, the seed of London University, was founded in 1826, while the history of civic universities outside London began in earnest with the foundation of Owen's College in Manchester in 1851. From this point the development of scientific and technological education has gone steadily forward through a whole range of institutions. After London and Durham, Owens College

was the next institution to appear and grow towards university status. University College Bristol was established as a limited liability company in 1876. Its southwestern location in an ancient trading city separates it from Manchester and Leeds, though less so from Liverpool. There was neither a major founder nor widespread support, as in the cases of Manchester and Liverpool respectively.

Sheffield's beginnings resemble those of Owen's College. Mark Firth, an engineer and industrialist, made a large contribution to establish a college, which would teach university subjects to largely local students, without religious restrictions. Mutually advantageous links with the local medical school resulted in eventual amalgamation. The differences from Owen's early days are reminders that thirty years had passed when Firth College opened in 1879. Oxford and Cambridge had begun to expand their activities.

Mason College, Birmingham, was founded in 1880, and followed what was by now the usual path: it had been preceded by a variety of unsuccessful colleges. It was linked with a medical school, it was secular, etc. Perhaps it is the fame of this testamentary stipulation, which has led to the peculiar notion that the new civic universities were founded primarily to teach science and technology. London and Manchester were essentially concerned with offering higher education of a more or less traditional sort without religious teaching and discrimination.

Academic Expansion: Universities

Recently, Lowe (2002) stated that the greatest parallel between the situation in 1900 and that in 2000 was that higher education in the UK found itself, at both times, in the midst of a dramatic expansion. In the UK as a whole, it is convenient to group the universities into categories which share the same broad characteristics. The universities in 1990 were quite different in operation from what they became during the twentieth century (Lowe, 2002). The categories are arbitrary, and some institutions do not fit well into any particular one.

Table 1: Universities in England (September 2008)

England

- Anglia Ruskin University (Anglia Polytechnic, 1989; renamed from Anglia Polytechnic University in 2005)
- University of the Arts, London (2007)
- Aston University (1966)
- University of Bath (1966)
- Bath Spa University (Bath Spa University College, 2005)
- University of Bedfordshire (established in 2006, merger University of Luton and De Montfort University's Bedford campus)
- University of Birmingham (1900)
- Birmingham City University (previously University of Central England in Birmingham, 1992)
- University of Bradford (1966)
- University of Bristol (1909)
- Brunel University (1966)
- University of Brighton (Brighton Polytechnic, 1970)
- University of Buckingham (private university, established in 1976)
- University of Bolton (Bolton Institute, 2005)
- Bournemouth University (Bournemouth Polytechnic, 1976)
- University of Cambridge (1226)
- University of Chichester (University College Chichester, 2005)
- Canterbury Christ Church University (Canterbury Christ Church College, 2005)
- University of Central England in Birmingham (City of Birmingham Polytechnic, 1971)
- University of Central Lancashire (Lancashire Polytechnic, 1972)
- Cranfield University (1969)
- City University (1966)
- Coventry University (Coventry Polytechnic, 1970)
- University of Cumbria (2007)
- De Montfort University (Leicester Polytechnic, 1969)
- University of Derby (Derbyshire College of HE, 1983)
- University of Durham (1832)
- University of East Anglia (1963)
- University of East London (Polytechnic of East London, 1970)
- Edge Hill University (Edge Hill, 2006)
- University of Essex (1964)
- University of Exeter (1955)
- University of Greenwich (Thames Polytechnic, 1970)
- University of Gloucestershire (2001; Cheltenham & Gloucestershire College of HE, 1990)
- University of Hertfordshire (Hatfield Polytechnic, 1970)
- University of Huddersfield (Huddersfield Polytechnic, 1970)
- University of Hull (1954)
- Keele University (1962)
- University of Kent at Canterbury (1965)
- Kingston University (Kingston Polytechnic, 1970)
- Lancaster University (1964)
- University of Leeds (1904)
- Leeds Metropolitan University (Leeds Polytechnic, 1970)
- Leicester University (1957)
- University of Lincoln (Humberside Polytechnic, 1983; renamed from University of Lincolnshire and Humberside in 2001)

- University of the West of England, Bristol (Bristol Polytechnic, 1969)
- University of Westminster (Polytechnic of Central London, 1970)
- University of Winchester (Winchester College, 2005)
- University of Wolverhampton (Wolverhampton Polytechnic, 1969)
- University of Worcester (University College Worcester, 2005)
- University of York (1963)
- York St John University (York St John University College, 2006)

- Nottingham Polytechnic, 1971
- Open University (1969)
- University of Oxford (1221)
- Oxford Brooks University (Oxford Polytechnic, 1970)
- University of Plymouth (Polytechnic South West, 1970)
- University of Portsmouth (Portsmouth Polytechnic, 1969)
- University of Reading (1926)
- Roehampton University (2004)
- University of Salford (1967)
- University of Sheffield (1905)
- Sheffield Hallam University (Sheffield City Polytechnic, 1969)
- University of Southampton (1902)
- Southampton Solent University (Southampton Institute, 2005)
- Staffordshire University (Staffordshire Polytechnic, 1970)
- University of Sunderland (Sunderland Polytechnic, 1969)
- University of Surrey (1966)
- University of Sussex (1961)
- University of Teesside (Teesside Polytechnic, 1970)
- Thames Valley University (Polytechnic of West London, 1991)
- University of Warwick (1965)

- University of Liverpool (1903)
- Liverpool John Moores University (Liverpool Polytechnic, 1970)
- Liverpool Hope University (Liverpool Hope University College, 2005)
- University of London (1836)
- London Metropolitan University (the merger London Guildhall University & University of North London in 1st August, 2002)
- London South Bank University (South Bank Polytechnic, 1970)
- Loughborough University (1966)
- University of Manchester (founded in 1851, Victoria University of Manchester and UMIST merged in October 2004)
- Manchester Metropolitan University (Manchester Polytechnic, 1970)
- Middlesex University (Middlesex Polytechnic, 1973)
- University of Newcastle upon Tyne (1963)
- Northumbria University (Newcastle upon Tyne Polytechnic, 1969)
- University of Nottingham (1948)
- Nottingham Trent University

English Universities

First of all, the ancient universities of Oxford (1221) and Cambridge (1226) are different from the others in size, organisation, wealth, social origins of students, indeed in almost every respect.

Secondly, the larger and older civic universities of England and Wales all have their origins in 19th century foundations. Currently, 39 independent, self-governing colleges are related to Oxford University in a type of federal system, not unlike the United States. On the other hand, the Cambridge University has relatively similar number of college communities 31 in total. Chronologically, the first of the other older universities is Durham (1832), which is, like Oxford and Cambridge, collegiate. However, it is neither very big nor in a large city. After Durham the next university was founded in London (1836).

Thirdly, by the 19th century, the pressure of industrial expansion was turning voluntary experiments into official institutions. Ten universities was founded between 1820-1920 in large cities in the forefront of the industrial revolution and thereafter e.g. UMIST (1824, Received Royal Charter in 1880), Manchester (1851), Birmingham (1900), Southampton (1902), Liverpool (1903), Leeds (1904), Sheffield (1905), Bristol (1909) and Reading (1926). These are therefore referred to as the civic universities, which first adopted research into their missions (MacBryde, 1998) and also where general education, vocational training, and scholarship, had been woven together (Dainton, 1981).

Fourthly, there are the new, post-World War II foundations (Graves, 1988). Keele (1962) started life in 1948 as a university college offering Manchester degrees but all the others were fully independent from their foundation. The University of Nottingham (1948) was the first new university after the Second World War, and was followed by Hull (1954), Exeter (1955), Leicester (1957), Sussex (1961), East Anglia, Newcastle and York (1963), Lancaster (1964), Essex (1964), Warwick and Kent (1965) and Salford (1967). Eight new green field universities were being built by the time the Lord Robbins Report was published in 1963 and more were being demanded. This is in contrast with the last major restructuring following the Robbins Report (Committee on Higher Education, 1963), when 22 new universities were created to double the total of 44 (Jones, 1994).

Lastly, The 1960s were a time of great turmoil, and major expansion to

the university system (Buisseret, 1987), which led to the idea of two sectors, essentially university and polytechnic, running in parallel. There are the former Colleges of Advanced Technology (CATs') upgraded upon the recommendation of the Committee on Higher Education chaired by Lord Robbins, whose report in 1963 has been the reference point for virtually all discussion of higher education ever since. These are now known as Aston, Bath, Bradford, Brunel, City, Loughborough, Surrey (1966) and Salford (1967) in England, and Strathclyde (1964) and Heriot-Watt (1966) in Scotland.

Scottish Universities

The Scottish universities are usually considered a separate category, largely in deference to the ancient four which have the peculiarity of drawing their powers from Acts of Parliament rather than from Royal Charter.

Table 2: Universities in Scotland, Wales and Northern Ireland (September 2008)

Scotland
• University of Aberdeen (1495)
• University of Abertay Dundee (Dundee Institute of Technology, 1888)
• University of Dundee (1967)
• University of Glasgow (1451)
• Glasgow Caledonian University (merger of Glasgow Polytechnic, 1971; and the Queen's College, Glasgow)
• University of Edinburgh (1583)
• Heriot-Watt University (1966)
• Napier University (Napier Polytechnic of Edinburgh, 1964)
• University of the West of Scotland (merger between University of Paisley and Bell College on 1 August 2007).
	• Robert Gordon University (Robert Gordon Institute of Technology, 1881)
	• University of St. Andrews (1411)
	• University of Strathclyde (1964)
	• University of Stirling (1967)
	Northern Ireland
	• Queen's University of Belfast (1908)
	• University of Ulster (1965) [Ulster Polytechnic, founded in 1971, and New University of Ulster, founded in 1968, merged in 1984 to form the University]
	Wales
	• Cardiff University
		(1883)
		• University of Glamorgan (Polytechnic of Wales, 1970)
		• Swansea University
		• Swansea Metropolitan University (Swansea Institute, 2008)
		• University of Wales (1893)
		   - Aberystwyth
		   - Bangor
		   - Cardiff
		   - Swansea
		   - Lampeter
		   - Institute
		   - Newport

St. Andrews (1411) is Scotland's first University and the third oldest in the UK. It is small, residential and collegiate in character. In the Renaissance, St. Andrew's city was a thriving intellectual centre with links to Paris and other continental university towns. The other three ancient foundations, Glasgow (1451) followed by Aberdeen (1495) and Edinburgh (1582), resemble the large civics, as do Strathclyde, which historically has many similarities to UMIST (Manchester), and Dundee (1967). The latter devolved from St. Andrew's in the same way as Newcastle from Durham. The University of Glasgow, founded in 1451, is the second oldest university in Scotland and the fourth oldest in Britain. Modelled on the University of Bologna, Glasgow was, and has remained, an University in the great European tradition. Aberdeen is the third oldest of Scotland's four ancient universities, founded in 1495 as Columbus was opening up the New World, and the 'new learning' of the Renaissance was spreading through Europe. William Elphinstone, Bishop of Aberdeen and Chancellor of Scotland, established King's College to train doctors, teachers, and clergy for the communities of northern Scotland, and lawyers and administrators to serve the Scottish crown (MacBryde, 1998). But the college also looked outward to the wider world of Europe and beyond: taking the great European universities of Paris and Bologna as its model. The University of Edinburgh was granted its Royal Charter in 1582 by James VI, the son of Mary, Queen of Scots, and the first civic University to be established in the British Isles. Heriot-Watt (1966) is a new foundation and Stirling (1967), although it used to offer some Edinburgh University degrees, has similarities to the ex- Colleges of Advanced Technology (CATs).

Northern Ireland Universities

Like Scottish universities, Northern Ireland universities are also considered a separate category. As Holt et al. (1999) noted, the education system in Northern Ireland has its own legislation and structure. In Northern Ireland, the Queen's University of Belfast (1908) is a large civic university, and the University of Ulster (1965) is a new foundation. In 1984, Ulster Polytechnic joined with the New University of Ulster to form the University of Ulster, thus removing the binary divide which had separated universities from polytechnics and colleges.

Wales Universities

The HE sector in Wales consists of fourteen colleges, with the constituent

colleges of the wider University of Wales. The largest colleges, by student numbers, are Cardiff University and the University of Glamorgan, followed by Swansea University and Bangor University (University College North Wales). The Institute of Cardiff and the University College of Newport were inaugurated into the University of Wales umbrella in 1996. The University of Wales, is the national federal university in Wales. It awards the degrees of its member institutions. It was established in 1893.

Waves of Legislation Change

There is no single coherent body of legislation dealing with higher education. However, there are some particular Acts of Parliament directly relevant to higher education. In 1963, the Robbins Report, sponsored by the Government, laid down the basic principles which guided university development in subsequent years. The Report stated that '…courses of higher education should be available to all those who are qualified by ability and attainment to pursue them and who wish to do so'. This policy was continued by Mrs Thatcher, who, as Secretary of the State for Education and Science in the Health government, was able in the 1972 White Paper, Education: A Framework for Expansion, to announce a policy that would continue to expand higher education (HMSO, 1972, para 118). In February 1978 Gordon Oakes, the Labour minister responsible for higher education, produced a consultative document called Higher Education into the 1990s, which offered alternative future plans for discussion (Department of Education and Science [DES] 1978). In December 1980 the Conservative Government abandoned its level funding policy and announced the reduction in funds for home students. The sheer waste of skilled manpower involved in requiring universities to generate these guesses on hypothetical grant levels while ministers were deciding grant levels of an entirely different order was considerable.

The 1988 Education Reform Act

In 1987, the Government White Paper 'Higher Education: Meeting the Challenge' proposed major changes to the organisation of higher education. These changes were brought into existence by the Education Reform Act of 1988 which, among other reforms, saw the establishment of two new councils who between them assumed responsibility (in April 1989) for funding universities, polytechnics and higher education colleges (Kogan and Hanney, 2000). The United Kingdom Education Reform Act (1988)

was a confirmation and crystallisation of the policies that had been developing over the previous decade. This major reform was described by Maclure (1988, p ix) as 'The most important and far-reaching piece of educational law-making … since the Education Act of 1944 … because it altered the basic power structure of the education system'. The polytechnics and other higher educational institutions were removed from local authority control (Bush, 1995); further education colleges were given control of their budgets and responsibility for staffing matters; the University Grants Committee (UGC) was replaced by the Universities Funding Council (UFC) and arrangements were initiated by the appointment of university commissioners to abolish the tenure of academics (Fulton, 1991; Kogan and Hanney, 2000). Along with the demise of the UGC, the government directed that 'state expenditures on higher education should be regarded as payments for services provided rather than as block grants to institutions' (Johnes, 1992, p. 173). Universities and Polytechnics were forced to develop competitive "bidding schemes" for students to increase institutional cost-effectiveness. These reforms, together with a changed emphasis on the criteria for funding, were central to the changes in policy and structure of higher education (Conway et al., 1994; Williams, 1990). The 1988 Education Reform Act ensured that all assets and inherited local authority debts were transferred to these independent higher education institutions. For the first time, institutions could determine their own academic programme and the student market they wished to serve. Many institutions chose to expand as the funding regime tended to reward the efficient players. Institutions, mainly higher education institutions expanded rapidly, moving from a mainly postgraduate part-time course provider into a mainly full-time one. Their low fixed costs helped them to bid for increasing student numbers. Ferlie et al. (1996, p. 64), in assessing the effects of the Education Reform Act (ERA) argue that:

> The 1988 Education Reform Act contains a series of measures which when taken as a whole seek to restructure the power balance and dominant culture of the educational system.

The Further and Higher Education Act 1992

Change came again in May 1991 when the Government's White Paper 'Higher Education: A New Framework', proposed a number of substantial changes, the most significant of which was the abolition of the binary line between universities and the polytechnics and colleges. In this White Paper

the Government stated 'the real key to achieving cost effective expansion lies in greater competition for funds and students … that can best be achieved by breaking down the increasingly artificial and unhelpful barrier between universities, polytechnics and colleges'. This came into effect in March 1992 when the Further and Higher Education Act 1992 introduced major reforms in England and Wales, including the creation of a single sector for all higher education institutions in England and another in Wales, funded by the Higher Education Funding Councils (Kogan and Hanney, 2000). The polytechnics were founded in the 1970s, and became the 'new' universities in 1992 (Warren, 1997). The 'binary system' was abolished by the Department of Education and Science (DES) in 1992. At the same time, the Polytechnics and Colleges Funding Council (PCFC) were merged with the University Grants Commission (UGC) to form the Higher Education Funding Council (HEFC), which was responsible for the distribution of public funding both to universities and higher education colleges (HECs) with higher education work. Despite the funding crises of the early 1980s and 1990s, certain policies seemed to persist in long term:

> Universities and colleges have remained academically autonomous. Institutions have been expected to meet diverse needs, regionally as well as nationally.

> (UK Higher Education Quality Council [HEQC] 1994, para 41)

In United Kingdom, new funding councils were established, with separate Higher Education Funding Councils for England (HEFCE), Scotland (SHEFC) and Wales (HEFCW). Funding of higher education in Northern Ireland continued to be the responsibility of the Department of Education of the Northern Ireland Office. The Council for National Academic Awards (CNAA), which had validated the degrees of institutions of higher education other than universities, was dissolved. As Kogan and Hanney (2000, p. 123) noted in their discussion of the issue, 'The Funding Councils were required to set up Quality Assessment Committees to assess quality in higher education. The CNAA was to be abolished. University status for polytechnics and all universities and colleges brought within a single funding mechanism operated by the Funding Councils for England, Wales, Scotland and Northern Ireland, which formally took over from April 1993 but started functioning earlier'. Forty-one additional institutions achieved university status under the Further and Higher Education Act. Subject to the approval of the Privy Council in each case, polytechnics and other institutions of higher education (e.g. Bolton Institute, 1982; London Institute, 1986; and

Surrey Institute of Art and Design, 1969) were eligible to become degree-awarding bodies in their own right and, if they met certain criteria, might take the title of university (Holt et al., 1999).

Concluding Remarks

This article discussed the contents to the historical development and philosophical basis and the issue of UK higher education and has also given an outline of the fundamental background to the development of higher education institutions and the structure of the environment in which they operate. The institutions differ from each other depending upon their mission, location and academic purpose. This article has considered the phenomena which triggered many of the changes that occurred in UK higher education in the 1960s and 1990s, and which consequently led to the creation of structures for quality assurance and research activity. The development of the higher education system in the United Kingdom must be understood in its total context, including this historical examination of the interaction between government legislation and politics. Within this context, we can begin to arrive at a more complete understanding of the current higher education system within the UK.

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Human Resource Planning and Employment Function in the Local Private Manufacturing Enterprises in Bangladesh

Dr. Nargis Akhter*

Abstract

The success of any business depends much on its human resource planning and employment function. Hence, human resource planning and employment function should get a high priority in an organization. The private sector leads the recent industrial development tempo of Bangladesh. There is an absence of knowledge –base regarding the practice of human resource planning and employment function of the local private manufacturing enterprises in Bangladesh. Against this backdrop the author thought it is urgent to focus on the human resource planning and employment function of the local private manufacturing enterprises with a view to create a knowledge-base to be exploited as a meaningful starting point for its development.

1.1 Statement of the Problem

Organizations receive four basic kinds of resources from their environments. These are: human, monetary, physical and information. Human resource includes managerial talent and labour (Griffin, 1987). The people do the work (through utilizing the other resources) and also provide the creativity that sustains operations. Human resource significantly affects organizational effectiveness. It will be clear from the following statement that human resource is the most important element of any organization even in today's world of computer, automation, and ever-increasing technology. Human element is not only the important but the most difficult element also because "Men are dynamic beings, having hopes and emotions, affections and aspirations, opinions and traditions and respond in various ways according to treatment (Pylee and George, 1985).

* **Associate professor, Business Administration Department, East West University, Dhaka, Bangladesh**

This article is based on the unpublished part of the author's Doctoral Thesis "Human Resource Management in Bangladesh: A Study of Some Local Private Manufacturing Industries" submitted in 2002 to the Department of Management Studies, Faculty of Business Studies, Dhaka University.

Human Resource Management is concerned with effective management of people at work and examines what can and should be done with a view to make working people more productive and satisfied. The terms personnel management, personnel administration and human resource management (HRM) are used interchangeably but the term HRM is the modern among these term. HRM reflects the increased concern both society and organizations have for people (Ivancevich, 1998).

HRM Human Resource Planning is the process of getting the right number of people at the right place at the right time. An effective human resource plan also supplies mechanisms to remove any gap that may exist between supply and demand (Ivancevich, 1998). The success of any organization also depends on its employment function. The employment function includes recruitment, selection and orientation.

Like developed nations, manufacturing enterprises are considered as the engine of growth for the developing countries, and the developing countries of the world are trying to raise their share of total global production. Bangladesh being a developing country is not an exception to it. Today, there is a greater social consensus regarding the role of private sector, which it can and should play in the economic development of Bangladesh.

In Bangladesh, there is a 'poor knowledge-base' regarding the human resource planning and employment function in the various local private manufacturing enterprises of our country. So, it is the urgently needed to bring to light the human resource planning and employment function of the local private manufacturing enterprises of our country which may serve as a meaningful starting point for its development. The present study is a modest attempt in this direction.

This 'knowledge-base' regarding human resource planning and the employment function may help in making objective analysis of the same and incorporating necessary changes regarding human resource planning and employment' function of local private manufacturing enterprises. The researcher tried to address the following specific study issues/questions relating to the Human resource planning and employment function of the local private manufacturing enterprises in Bangladesh:

(a) Do these enterprises prepare human resource planning? If so, how do they prepare it and whether they prepare short or long-range plans?

(b) What are the different sources of recruitment of these enterprises?

(c) What steps/techniques are used by these enterprises for selecting different groups of employees?

(d) What types of tests and interviews are used by these enterprises? Do these enterprises use test battery and measure reliability and validity of tests?

(e) Do these enterprises arrange formal orientation program for the new employees?

2. Objective of the Study

In light of the above mentioned-study questions/issues, the objective of the study was to make a knowledge-base regarding
human resource planning and employment function of local private manufacturing enterprises in Bangladesh.

3. Methodology

3.1 Area Surveyed

The study was confined to Dhaka City and its adjacent areas. The Dhaka City was selected as study area because Dhaka is the main locus of manufacturing enterprises of Bangladesh. Time and cost were other important considerations for such a decision.

3.2 Selection of Sample Enterprises

In order to select sample enterprises, a list of companies (with information regarding years of production experience and number of employees of these companies) enlisted with Dhaka Stock Exchange Limited was obtained and 10 enterprises were selected in such a way so that industries of different nature and sizes are represented in the sample enterprises. Only those enterprises were selected which had production experience for a minimum of 4 years because it was felt that newly started enterprises which had just gone into production might not have developed any definite human resource management practice.

On the basis of the number of employees, the industries were classified into 3 categories- small (employing more than 100 but less than 250); medium (employing 250 or more but less than 500) and large (employing 500 or more).

3.3 Data Collection

The study used both primary and secondary data. Most of the data required for the study were collected from primary sources through questionnaire. In order to collect primary data, 10 persons belonging to the position of the head of human resource department were selected. Relevant books, reports and articles were used as the secondary sources of data.

4. Findings of the Study

4.1 Human Resource Planning in the Enterprises under Study

There is absence of manpower planning in case of all small and medium enterprises. When vacancy arises or more manpower is required in a department, the concerned department sends requisition to the HR departments. The HR departments then place these requisition to the chief executive. The chief executive may or may not approve the requirements or modify the requirements. A different picture was found in case of large enterprises. 66.67% of the large enterprises covered by the study prepare short-range manpower plans and the rest 33.33% prepare long-range plans. The enterprises which prepare short-range plans, determine manpower requirements on the basis of short-term budgets of different departments and short-term changes in the work force. The enterprises, which prepare long-term manpower plans, determine manpower requirements on the basis of long-term budgets of different departments and long-term changes in workforce.

The HR departments of all these enterprises maintain records regarding age, experience and education of the present workforce, which is called manpower inventory, and after determining the manpower requirements they assess the manpower inventory. The HR departments of the enterprises which prepares long-term manpower plan, also maintains replacement charts to fill key positions. By assessing the manpower inventory (both small and large enterprises which prepare manpower plans) and replacement charts (large enterprises which prepare manpower plans), the HR departments of these enterprises make information regarding internal supply.

After determining demand for and supply of manpower, HR departments develop action plans. These plans may be for filing up the anticipated openings internally or for selecting employees from outside. The HR manager places this plan before chief executive. The chief executive examines this plan and approves the same, if satisfied. In case of disagreement, the plan may be modified as per the chief executive's advice.

4.2 Employment Function

Employees are brought into enterprises through recruitment and selection process. Success or failure of the employment depends much on the recruitment and selection process.

4.2.1 Recruitment of Employees in the Enterprises under Study

When a vacancy occurs in the enterprises, all the enterprises at first try to recruit from the existing employees. In case of unavailability of competent personnel in the enterprises these enterprises go for external sources. The table 4.1 depicts external sources used for recruiting different levels of managers in the enterprises under study. The table shows that 60% of the small enterprises use only advertisement for recruiting employees belonging to different levels of management, 20% use advertisement and employee references and another 20% use advertisement, employee references and unsolicited applicants. In case of medium sized enterprises, advertisement, employee references and educational institutions are used by 50% enterprises and another 50% use advertisement, employee references and unsolicited applicants. In case of large enterprises, 66.67% use advertisement, employee references, educational institutions and unsolicited applicants and 33.33% use advertisement and unsolicited applicants.

Table 4.1 External Sources used for Recruitment of Different Levels of Managers

Different Sizes of Enterprises under study						
Small			Medium		Large	
60%	20%	20%	50%	50%	66.67%	33.33%
Advertisement	Advertisement	Advertisement	Advertisement	Advertisement	Advertisement	Advertisement
-------	Employee References	Employee References	Employee References	Employee References	Employee References	-------
-------	-------	-------	Educational institutions	-------	Educational institutions	-------
-------	-------	Unsolicited Applicants	-------	Unsolicited Applicants	Unsolicited Applicant	Unsolicited Applicants

The table 4.2 depicts external sources used for recruiting workers in the enterprises under study. The table shows that in case of small enterprises

under study, 40% use advertisement, employee references and unsolicited applicants, another 40% use employee references and unsolicited applicants and 20% use only employee references. In case of medium enterprises, all of them use advertisement, employee references and unsolicited applicants. In case of large enterprises, 66.67% use advertisement, employee references and unsolicited applicants and the rest 33.33% use advertisement and unsolicited applicants.

Table 4.2 External Sources used for recruitment of workers

Different sizes of enterprises					
Small			Medium	Large	
40%	40%	20%	100%	66.67%	33.33% large industries
Advertisement	-------	-------	Advertisement	Advertisement	Advertisement
Employee references	Employee references	Employee references	Employee references	Employee references	-------
Unsolicited applicants	Unsolicited applicants	-------	Unsolicited applicants	Unsolicited applicants	Unsolicited applicants

4.2.2   Selection Process of the Enterprises covered by the Study:

The study revealed that screening the application, interview and hiring decision are common steps taken for selecting employees. In addition to these common steps, 70%, 60% and 10% of the enterprises covered by the study take testing, checking references and medical testing respectively.

Analysis on the basis of the number of the enterprises showed that all the small enterprises take screening the application, interview and hiring decision. In addition to these common steps, 40% and 20% of the small enterprises take the steps testing and checking references respectively. All the medium size enterprises covered by the study take the steps screening the application, testing, interview and hiring decision and only 50% of these medium size enterprises take the step checking references. The steps screening the application, testing, interview, checking references and hiring decision are taken by all the large enterprises covered by the study and only 33.33% of the large enterprises take the step medical testing. The table 4.3 shows the selection processes of different sizes of enterprises covered by the study.

Table 4.3 Selection Processes of the Different Sizes of Enterprises covered by the Study

Selection process of the small enterprises under study			Selection process of medium enterprises		Selection process of large enterprises	
60% of small enterprises	20% of small enterprises	20%0f small enterprises	50% of small enterprises	50% of small enterprises	66.67% of large enterprises	33.33% of arge enterprises
Screening the Application	Screening the Application	Screening the Application	Screening the Application	Screening the Application	Screening the Application	Screening the Application
Interview	Testing	Testing	Testing	Testing	Testing	Testing
	Interview	Interview	Interview	Interview	Interview	Interview
-------	-------	Checking reference	-------	Checking reference	Checking reference	Checking reference
-------	-------	-------	-------	-------	-------	Medical test
Hiring decision	Hiring decision	Hiring decision	Hiring decision	Hiring decision	Hiring decision	Hiring decision

4.2.3   Use of Tests in the Enterprises under study:

Use of tests is only restricted to the employment of junior level managers, typists, drivers and machine workers. Tests on intelligence, aptitude and general knowledge in amalgamated written forms are used for junior level managers by these enterprises and personality is tested at the time of taking interview. Achievement tests are used for typists, drivers and machine workers. Peons and non-machine workers don't go for any type of tests. The study also revealed that the enterprises under study neither use test battery nor are concerned with the reliability and validity of the tests.

4.2.4   Use of Interview in the Enterprises under study:

All the enterprises covered by the study use interview as one of the techniques of selection process and majority (60%) of them use mixed interview method. Analysis on the basis of the size of the enterprises showed that 20% of the small enterprises use structured method or depth method, another 20% use non-structured method and the rest 60% of the small enterprises use mixed interview method. In case of medium enterprises, 50% of these enterprises use non-structured interview method and other 50% use mixed interview method. In case of large enterprises,

66.67% of the enterprises use mixed or depth interview method and the rest 33.33% use non-structured or depth interview method.

4.2.5   Use of Formal Orientation Programme in the Enterprises under Study:

None of the enterprises covered by the study has any formal orientation programme. When a new employee joins an organization the usual practice is to introduce him or her to his or her work situation by the department head or any other supervising officer.

Conclusion

There is absence of human resource planning in small and medium enterprises and all the large enterprises covered by the study prepare human resource plan. All the enterprises covered by the study at first try to recruit from existing employees, when there is a vacancy. In case of unavailability of competent personnel in the enterprises, external sources are used. The external sources of recruitment are advertisement, educational institutions, employee references and unsolicited applicants. 66.67% of the large enterprises use application blanks but none of the small and medium enterprises use application blanks. In all the enterprises under study, screening the application, interview and hiring decision are common steps taken for selecting employees. Besides, some of the enterprises also take testing, checking references and medical test. The study found that the enterprises that use test they use it for selecting lower level managers, typists, drivers and machine workers. None of the enterprises under study neither uses test battery nor is concerned with the reliability and validity of the tests. Majority of the enterprises covered by the study use mixed interview (Le. both structured and non-structured) method. None of the enterprises covered by the study has any formal orientation program. However, the departmental head or the new employee's senior colleague introduces him/her to the work situation.

The study recommends that a study should be conducted in order to do an objective analysis of the human resource planning and employment function of local private manufacturing enterprises in Bangladesh covered by this study so that incorporation of necessary changes therein becomes easier to cope with the current and future challenges in the employment function of local private manufacturing enterprises in Bangladesh.

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Forms and Intensity of Gender–Inequality: Why does it exist?

Mamunur Rashid*
Dr. Taslima Begum**
Eijaz Ahmed Khan***
Tarun Kanti Bose****

Abstract

The majority of the world's poor are women and children. Women provide most of the childcare. In many poor countries, they produce half of the food and they make up a quarter of the work-force in industry and a third in services. Empirical evidence indicates that there are significant gender differences in all spheres of social and family lives in the developing countries. Bangladesh, as a typical developing country with a high level of illiteracy and over-population, is not free from the problem of gender disparity. While the government is trying to use its population as an appropriate workforce, substantial level of gender disparity, especially in the rural areas, is putting an obstacle to that development process. The basic objective of this study was to find out the forms of gender disparity and the extent to which gender-inequality is prevailing in Khulna district. The findings of the study clearly suggest that there are gender disparities throughout Khulna district. The basic reasons of gender bias have been identified as lack of full access to education and early marriage. The gender bias has been spread out from the freedom of opinion to the involvement of economic activity. Efforts should be made to increase mass-awareness about the demerits of illiterate and inactive women in the family. Electronic and print media should increase their programs on theses issues so that rural families can understand the importance of full participation of women in all spheres of life.

* **Associate Professor, Business Administration Discipline, Khulna University, Khulna 9208, E-mail: rmamunur_ku@yahoo.com.**

** **Coordinator, Center for Development and Entrepreneurship Research (CDER), House No. 56/ka, Road No. 05, Nirala R/A, Khulna 9100.**

*** **Assistant Professor, Business Administration Discipline, Khulna University, Khulna 9208**

**** **Lecturer, Business Administration Discipline, Khulna University, Khulna 9208. E-mail: tarun84ku@yahoo.com.**

Introduction

Over the last several decades, gender issues have attained increased prominence in the debates over from civil society. There is a growing body of evidence and experience linking gender awareness in policy and projects to equitable, efficient and sustainable outcomes in development. However, these links are still not widely understood nor have these lessons been fully integrated by donors or national policy makers (Pierrella, 2002). These days it is becoming increasingly important for the women to participate in higher education in order for improving the quality of their economic, social and spiritual lives and/or for coping with changes to their living standards, as well as for providing protection from exploitation. Further, without appropriate levels of education, opportunities are being restricted for those women to fulfill their collective responsibility to participate in bringing about social change (Kanwar and Taplin, 2001). Gender equality or equality between men and women entails the concept that all human beings, both men and women, are free to develop their personal abilities and make choices without the limitations set by stereotypes, rigid gender roles and prejudices. Gender equality means that the different behavior, aspirations and needs of women and men are considered, valued and favored equally (ILO, 2000).

Empirical evidence indicates that there are significant gender differences in all spheres of social and family lives in the developing countries. Time and task allocation by gender is responsive to economic incentives, idiosyncratic shocks, agri-commercialization and access to basic services, including childcare (Elahi, 2000). Bangladesh, as a typical developing country with a high level of illiteracy and over-population, is not free from the problem of gender disparity. By custom, the life of a woman in Bangladesh is shaped by the patriarchal, patrilineal and patrilocal nature of the social system. Her reproductive role is emphasized by social, cultural and religious traditions. The various elements of the social system thus interact to make women dependent on men or at risk when deserted and to produce a rigid division of labor and highly segregated labor market by gender (World Bank, 1992). The household is the primary production and consumption unit. Women contribute a great deal to the economy and to the family. Not only do they participate in agricultural and industrial labor but also they are entirely charged with cooking, cleaning, collecting firewood and water and washing. In addition, they assume full responsibility for rearing children and caring for the old and infirm (Gita, 2000). A woman's ability to be independent and take initiative, to acquire new ideas, skills and contacts and to obtain employment is restricted by her limited mobility. As a result, men have generally been the main beneficiaries of economic development while women have remained largely unskilled or semi-skilled.

Objectives of the Study

The fact that the severity of gender disparity in Bangladesh is high (World Bank, 2002), it can be very interesting to examine the forms and intensity of gender disparity in Khulna district. Hence, the hypothesis is that there is a high level of gender disparity in Khulna. The primary objective of this study was to find out the forms, i.e., types of gender disparity and the extent to which gender-inequality (in terms of right, resources and voice) is prevailing in Khulna district. The study has been conducted in rural areas.

Methods of Investigation

An extensive literature survey of secondary sources have been conducted to gather data about the present gender disparities in Khulna. Quantitative data were collected via interviews from rural women. The use of interview (survey) method in this study supports its general purpose, i.e., gathering information for inducing the characteristics of a population by observing a representative portion. Extensive interviews with women in some Khulna villages examined the basic factors responsible for gender disparities and how women in villages are oppressed (and to what extent) by male dominated concepts of 'traditional' customs and practices. Information regarding women's abilities and intentions to generate activities outside their homesteads had also been examined via interviews.

Sample Size: A sample of 150 female informants have been collected from the different villages for quantitative analysis. Samples were selected randomly from different villages of 05 Upazillas (out of 09) of Khulna district.

Field area: The number of villages for the field survey ranges from 10 to 20. The villages were randomly chosen from the 05 Upazilla headquarters of Khulna. The decision to use villages from 05 Upazilla headquarters of Khulna is based on the provision of an overall view of Khulna. The selection of particular areas and villages also ensures that those are from different parts of Khulna.

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                    ┌─────────────────┐
                    │     Khulna      │
                    │  (Population)   │
                    └────────┬────────┘
                             │
                             ▼
                 ┌───────────────────────┐
                 │ Cluster/Area Sampling │
                 │ (Upazilla Headquarters)│
                 └───────────────────────┘
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| Dakope | Batiaghata | Fultala | Dighalia | Rupsa |

Specific Number of Villages from different Upazillas
(At least 4 selected randomly from each Upazilla)
05 to 10 female informants from each Village
(Randomly selected)
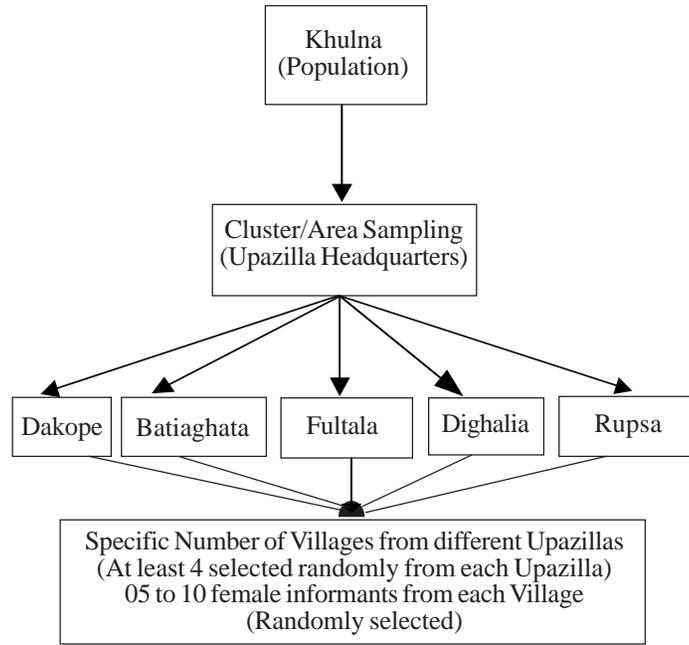
Data Collection: Quantitative data have been collected from village women through extensive interviews. In this regard, many faces of gender inequality (as discussed by Sen, 2001) like household, ownership, professional etc. were used as indicators of gender disparity. Other social factors like cultural, religious etc. were also used extensively. The basic questions revolved around the rights, access to resources and access to decision making inside the family and society as well. The prospects and motivation of women in increasing their participation in the economic activities were analyzed through asking some questions like their visions and future plans about participating in economic activities.

Data Processing: Data processing have been based on computer-aided statistical techniques. Collected data have been processed and analyzed using SPSS software. Manipulation of all those primary data has provided with a clear idea about the questions asked in this study.

Present Status of Women in Bangladesh

Bangladesh, with a land area of 147,570 square km, supports a population of over 124 million people. Approximately 90% of the population is reported to be Muslim with the remainder being Hindus, Christians, Buddhists, etc. The mobility of women is restricted throughout the country though variations can be seen between different regions as well as between different religions. The Government of Bangladesh has initiated a number of programs to improve the position of women in society. Recently the Department of Women's Affairs drew up strategy documents for addressing gender issues for the different sectors of the government. Many of the national and international NGOs working in the country have specifically targeted women. They have initiated different types of interventions covering a wide spectrum of welfare needs such as health and family planning provisions, micro credit, training for income generating activities and other initiatives that seek to empower women (Debashish et al, 2000).

Constitutional Status: Women have some rights recognized by the Bangladesh constitution. According to Article 15(d), under the heading of Fundamental Principles of State Policy, the rights and opportunities for women are the following (Asiatic Society of Bangladesh, 2004):

Article 27: equality of all citizens before law and equal protection under law and equal protection under law.

Article 28(1): no discrimination on grounds only of religion, race, caste, sex or place of birth.

Article 28(2): equal opportunity for men and women in all spheres of state and public lives.

Article 28(3): no discrimination on grounds only of religion, race, caste, sex or place of birth in providing access to any place of public entertainment or resort, or admission to any educational institution.

Article 29(1): equal opportunity for all citizens in respect of employment or office in the service of the republic.

Article 65(3): women are free to contest election from any constituency. But originally 15 seats had been reserved for women; the number has been raised to 30 now.

Educational Situation: Gender equity in primary and secondary (school) education levels have been achieved in Bangladesh. At the same time, it has to be remembered that when about half of the children are not completing primary education, achievement of equity still leaves a very large number of both girls and boys deprived of their right to education. At the higher secondary level (grade 11-12) the ratio (male: female) is 65:35. It is not conceivable that under the given socio-economic (Business as usual) scenario the gender ratios at the higher secondary level and beyond (un-

dergraduate and graduate levels) are going to be changed significantly in the future. Possibly, only much higher and sustained economic growth (about 7-8 percent per annum) and positive interventions at the HSC and tertiary levels can improve the gender balance (Asiatic Society of Bangladesh, 2004).

Economic Disparities: Although economic life of women contribute to very significantly to production in agriculture sector, particularly in all post harvest activities; only 45.4% of them are considered to be employed in agriculture. Women are more than 70% of the workers in the garment industry, which is the most important foreign exchange earner of the country. Women also work in the construction sector and are emerging as small traders and entrepreneurs.

Gendered nature of poverty is also manifested by the number of female headed households, which was singled out as a represented category. Findings of a number of researches showed that women are more likely to be victim of poverty, deprivation and powerlessness in the female-headed households compared to the male–headed households (Asiatic Society of Bangladesh, 2004).

Disparity in the Political Field: At the local level, the government took several measures for empowering women politically. The most important among those was the reservation of three seats out of the total twelve in each Union Parishad for women. However, the Constitution of Bangladesh provides reserved seats for women through indirect election in the parliament. The affirmative action of the women's quota in the Parliament was originally set at 15 for 10 years, which was later increased to 30 for an extended period of 15 years. This was in addition to the 300 general seats. The provision for reserved seats for 30 women in the Parliament lapsed in 2001. There are only 3 women ministers (including the Prime Minister) in the 50 plus members of Cabinet and 7 directly elected women in the Parliament. Majority of women's groups, supported by several political parties, civil society organizations and the media, demand an increase in the reserved seats for women in the national parliament, but that they should be elected directly in their respective constituencies instead of being selected by the members of the parliament. This is yet to happen. In other areas of decision-making such as the bureaucracy and high level jobs, which entail visibility and exercise of authority, women's presence is negligible (Rahman et al, 2005).

Women in Civil Service and in Development: In the Secretariat, the number of female employees is very insignificant. Following table shows this picture:

Table 01: Women in Civil Service

	Total employee	Female employee
Ministries and Division	8611	784
Class I and II (gazetted officers)	2070	212
Class III and IV (non-gazetted)	6541	572

Source: Banglapedia: The National Encyclopedia of Bangladesh, Volume 10, The Asiatic Society of Bangladesh, p. 412.

Table 02: Women in Development

Sectors	Percentages
Agriculture	79%
Manufacturing and transport	9.9%
Service workers	5.3%
Professional or technical workers	5.3%
Sales workers	2.2%
Clerical workers	0.6%

Source: Banglapedia: The National Encyclopedia of Bangladesh, Volume 10, The Asiatic Society of Bangladesh 2004, p. 413.

Gender Issues in Bangladesh

A recent study by the World Bank on the issue of gender dimensions (2002) on some selected low and middle income countries found the following picture in Box 1. Bangladesh lies in the low per-capita range and its gender development is also very low. Table 03 below indicates that there were accompanying safety net or relevant operations in all those evaluating countries, but in general those did not attempt to mitigate adverse impact on women specifically.

Table 03 shows that, the severity of gender disparity in Bangladesh is high while the policy formulation to integrate gender issue in social protection measure is moderate. But the most unfortunate thing is that there is no monitoring at all regarding the policy implementation to reduce gender disparities. Some of the most important indicators that show the status of women in Bangladesh are something like the following:

· women are disproportionately represented amongst the poor

· have less access to formal employment and earn less
· they continue to face violence and abuse
· inequality is well reflected in the health indicators
· maternal mortality rates are amongst the highest in the world
· mortality and malnutrition rates for girls are higher than for boys

Bangladesh has had a policy for the advancement of women since 1976. The Ministry of Women and Children Affairs serves as the focal point in the national machinery for the advancement of women's issues. Its role is to facilitate government-wide mainstreaming of a gender equality perspective in all policy areas. It advocates, coordinates, communicates and monitors implementation of the National Action Plan (NAP). The principal goals of the NAP are: to remove legal, economic, political or cultural barriers, to raise public awareness about women's differential needs, to improve women's development and to provide full equality of opportunity. Nevertheless, gender disparity is still one of the main causes for the economic under development of Bangladesh. Government effort seems neither adequate nor appropriate to solve this problem.

Table 03: Integration and Monitoring of Gender Issues in Some Selected Countries

Country	Severity of Gender Disparities (1)	Integration of Gender into Social Protection Measurer (2)	Monitoring of Gender Issues in Adjustment Measures (3)
Kyrgyz	M	N	N
Ecuador	M	M	N
Zambia	H	M	M
Bangladesh	H	M	N
Vietnam	M	M	M
Yemen	H	M	N
Philippines	M	N	N
Poland	N	M	M
SriLanka	M	M	N
Cote d'lvoire	H	M	N

Note: All ratings are on a four-point scale, where N = Negligible, M Modest, SU = Substantial, H = High.

1. This is based on a relative ranking of countries based on the UN Gender-related Development Index.
2. This rating is provided by the evaluation based on an integration of gender issues into the design of social protection measures that are financed by the Bank. These measures are not only the ones classified by the Bank as 'Social Protection', but also include social protection components in other Bank-supported projects of the 1990s.
3. This rating is provided by the evaluation based on monitoring of gender-disaggregated outcomes in adjustment measures supported by the Bank in the 1990s.

Source: Adapted from: "The Gender Dimension of Bank Assistance: An Evaluation of Results", Operations Evaluation Department Report No. 23119, World Bank, January, 2002.

Table 04 shows some socio-economic indicators of Bangladesh from which the severity of gender disparity in Bangladesh can easily be understood:

Table 04: Selected Socio-economic Indicators of Bangladesh

Indicators	Years			
	1980-84	1985-89	1990-94	1995-99
General				
Gender Development Index (GDI)	---------	--------	0.33	0.43
Gender Empowerment Measure (GEM)	---------	--------	0.29	0.33
Share of Seats in National Parliament (% of Women)	---------	--------	0.09	0.09
Education				
Primary school enrollment, female, (% gross)	50.08	55.84	66.30	------
Primary school enrollment, male, (% gross)	73.70	72.96	76.50	------
Primary school enrollment ratio (female to male)	0.68	0.77	0.87	------
Secondary school enrollment, female, (% gross)	8.98	11.68	12.70	------
Secondary school enrollment, male, (% gross)	25.90	25.54	25.10	------
Secondary school enrollment ratio (female to male)	0.35	0.46	0.51	------
Primary education, teachers (% female)	7.83	11.98	19.38	------
Secondary education, teachers (% female)	6.69	9.45	9.55	------
Health				
Fertility rate, total (births per woman)	6.06	4.90	3.86	3.20
Births attended by health staff (% of total)	2.00	5.00	8.50	8.00
Under 5 mortality ratio (per 1000 live births)	192.00	139.00	126.00	100.00
Life expectancy at birth (female, years)	48.66	53.50	55.18	58.39

Life expectancy at birth (male, years)	49.50	53.10	55.10	58.27
Life expectancy at birth ratio (female to male)	0.98	1.01	1.00	1.00
Economic				
Arable land (hectares per person)	0.10	0.09	0.07	0.06
Employees, agriculture, (female, % ecn active pop)	80.00	----	84.90	77.50
Employees, agriculture, (male, % ecn active pop)	66.20	----	54.20	54.40
Employees ratio, agriculture, (female to male)	1.22	----	1.57	1.42
Employees, industry, (female, % ecn active pop)	13.9	----	8.80	7.60
Employees, industry, (male, % ecn active pop)	4.90	----	15.60	10.80
Employees ratio, industry, (female to male)	2.84	----	0.56	0.70
Employees, service, (female, % ecn active pop)	5.30	----	2.10	11.00
Employees, service, (male, % ecn active pop)	28.60	----	25.50	33.70
Employees ratio, service, (female to male)	0.19	----	0.08	0.33
Others				
Illiteracy rate, (% of female 15+)	81.84	79.00	75.72	72.50
Illiteracy rate, (% of male 15+)	58.10	55.52	52.72	49.80
Ratio of illiteracy rate, female to male, (age 15+)	1.41	1.42	1.44	1.46

Source: United Nations Human Development Report, 1999 and World Bank World Development Indicators, 2000.

Table 05: Demographic Situation of the Study Area

Study Area	Area in sq km.	No. of Households	Population	Density	Male	Female
Bataighata	248.33	29880	139500	561.7525	71140	68360
Dacope	991.58	29600	157360	158.6962	83960	73400
Dighalia	77.17	23260	114460	1483.219	62160	52300
Fultala	56.83	15240	71980	1266.585	36500	35480
Rupsa	120.15	35060	161900	1347.482	83640	78260

Source: BBS, 2001

Bangladesh is one of the signatories among 189 countries to Millennium Declaration 2000. As a part of that, Bangladesh is working towards achieving the Millennium Development Goals (MDGs) committing herself to a set of internationally agreed development targets. Analysis has been carried out in terms of present status, progression or regression over time and the degree of changes with focus on gender and regional variation (Rahman et al, 2005). Gender violence is a daily and often deadly fact of life for millions of women and girls around the world. In most of Bangladesh, the family is mainly patriarchal, patrilocal and patrilineal and the region is well known for the kinds of egalitarian gender relations that are related with gender violence. The growing ubiquity of gender specific violence in public places like domestic violence, especially wife battering, is perhaps the most widespread form of violence against women. In countries where reliable, large-scale studies on gender violence are available, more than 20% of women are reported to have been abused by men with whom they live (World Bank, 1993). The situation in Bangladesh is even worse where about half of the women are reported to have been abused by their husbands. In Bangladesh, gender based violence including wife-beating, rape, sexual abuse and dowry related torture and murder is widespread (Mannan, 2003).

This study has been conducted in five regions of Khulna. Total of 150 female informants have been collected from the different villages for quantitative analysis. Samples were selected randomly from different villages of 05 Upazillas of Khulna district. The respective villages were randomly chosen from the 05 Upazilla headquarters of Khulna. The decision to use villages from 05 Upazilla headquarters of Khulna is based on the provision of an overall view of Khulna. The selection of particular areas and villages also ensures that those are from different parts of Khulna. In this section an overall picture of the study area has been portrait to get an understanding about the background of gender inequality in the study area.

Among the selected regions, the density of Rupsa and Dighalia is highest and Dacope has the lowest density. Rupsa, Fultala and Batiaghata are very close to Khulna divisional head quarter. These three areas are rapidly urbanizing areas. On the contrary, the development process is relatively slow in Dighalia and Dacope.

Table 06: Percentage of Male and Female in Different Age Range

Age range	Batiaghata		Dacope		Fultala		Dighalia		Rupsha	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
11-20	0.0	10.0	0.0	3.3	0.0	13.3	3.3	3.3	0.0	13.3
21-30	26.7	63.3	16.7	53.3	23.3	56.7	16.7	63.3	43.3	53.3
31-40	43.3	16.7	60.0	36.7	46.7	20.0	46.7	26.7	40.0	23.3
41-50	16.7	6.7	20.0	6.7	26.7	10.0	26.7	6.7	13.3	10.0
51-60	13.3	3.3	3.3	0.0	3.3	0.0	6.7	0.0	3.3	0.0

Source: Field Survey, 2006

Male-Female Ratio

Male-female ratio in the study areas is 1.2:1. Most of the female (58%) is within the age range of 21 to 30 while in case of males the most of them are between the age of 31 and 41 (47%).

Family Structure

52.7% of the families in the study area are single families and rests are joint families. These variations are almost same in all regions except Dacope. In Dacope, 73% families are single families. On the other hand, the average family size is 5.4 in the study area. However, in Dighalia the family size is almost 6.

Religion

Most of the respondents are either Muslim or Hindu in the study areas. Islam is the dominating religion in all the areas; but in Dacope and Rupsha a significant portion, i.e., 33.3% and 27% (respectively) respondents are Hindus, while in Dighalia only 4% respondents are Hindus.
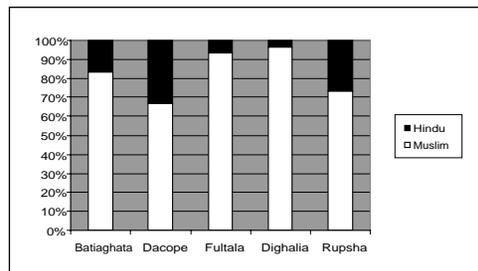

Figure 01: Religious Variations in Different Regions

Source: Field Survey, 2006

This research is based on the pre assumption that gender inequality exists in Bangladesh and the extent is severe. In the study, efforts had been put to identify the form and severity of this inequality in Khulna. Some interesting findings have come forward as the primary data has been analyzed. This part of the study is focused on the pattern and intensity of gender inequality in Khulna district.

Economic Status

Direct economic contribution of the women is not satisfactory. 33% of the women do not have any income at all. Those who earn, earn between Tk. 200 and Tk. 3500 with an average of Tk. 715. Most of the women earn not more than Tk. 1000 (57% of those who earn). It has been found that the correlation between total income of the family and income of women is 0.34 (Significant at the 0.01 level). Therefore, the contribution is not highly correlated.

There is a significant regional variation in pattern of income by female groups. It has been observed that average income of the women in Fultala is around Tk. 980 while in Batiaghata it is Tk. 807. However in spite of being very near to the urban area, the average income in Rupsha is only Tk. 400 (Figure 02).

The data base proves the fact that the more the women are educated the more they earn. However the earnings of illiterate women are slightly higher than those who have got primary education (Figure 02). Similarly Hindu women are found to earn (average income Tk. 486) more than a muslim woman (Tk. 475).
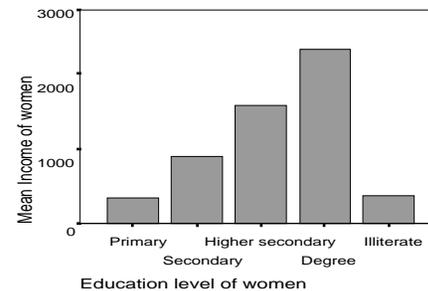

Figure 02: Educational Background and Average Income of Female Group

Source: Field Survey, 2006

The inequality can be clearly understood if the income variation between male and female is observed. The range of male income is between Tk. 700 and Tk. 10000 but female income ranges between Tk. 200 and Tk. 3500. Average income of males in the study area is Tk. 3561 and females' average income is Tk. 715. Therefore, females are far more behind from the viewpoint of involvement in economic activity.
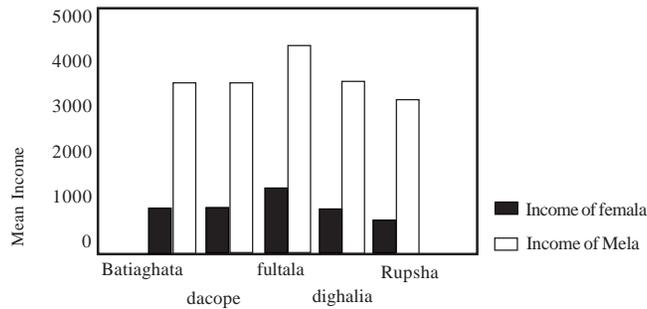

Figure 03: Income Variation in Different Region

Source: Field Survey, 2006

Unfortunately, women do not enjoy the output of their invested time for their activities. On an average, a woman spends 4.21 hours for economic activities and 13.15 hours for household activities. For the household activities they do not get any remuneration. In spite of working for 12 to 18 hours, only 1% women earn more than Tk. 3000; the efforts and hard works that they invest while doing household work, do not give them any monetary return. In most cases women contribute their earnings for family purpose (29%); but only 8.7% manage to save some money. About 4% of the women handover their income to their husbands.

Table 07: The Disparity between Time Invested and Money Earned

Working Hours	Income range in Taka				Total in %
	0-1000	1001-2000	2001-3000	3001 - 4000	
12	3	0	0	0	3
14	16	1	0	0	17
15	6	0	0	0	6
16	17	0	0	0	17
17	5	1	0	0	6
18	25	1	1	0	27
20	7	4	1	0	12
21	1	0	0	0	1
22	1	2	3	1	7
23	1	0	0	0	1
24	2	0	0	0	2
26	1	0	0	0	1
Total	85	9	5	1	100

Source: Field Survey, 2006

Occupation

It has also been found that most of the women work on a part time basis. 81% of the working women are mainly house wife and they earn from informal activities. However, 11% of the women works full time in private sector while a negligible number of women get the scope to work as NGO worker (3%). Most of the earnings come from in-house activities like handicraft, tailoring, farming etc (76%). Only 20% of the women are engaged in formal economic activities and 79% do informal economic activities.

Women who are engaged in formal activities earn Tk. 1407 on an average but women engaged in informal activities earn far less than that (Tk. 547). Most of the women are engaged in private services (55%) and others are engaged as tailor, labor, NGO workers and teachers etc. They are getting no money for their household activities but they are contributing a lot and supporting their families. However, many of the females are engaged in various secondary income generating activities. These activities includes, poultry firming (79%), tailoring (9%), laborer (7%), small business (4%) etc. On the contrary, male are found to be engaged in diversified activities. They are engaged as businessman, private service

holder, tailor, doctor, teacher, laborer, driver, rickshaw puller, painter etc. The rate of engagement of males is much higher than that of women. Moreover, women do not get engaged in some occupations like rickshaw pulling, driving due to social barriers (Figure 04).

Interestingly, educational status has not influenced any job selection decision. Although for some job educational qualification is must, but it was observed that some qualified women are engaged in jobs where they do not need any formal qualification. From this observation, it can be said that educational qualification of women are under utilized (Figure 05).
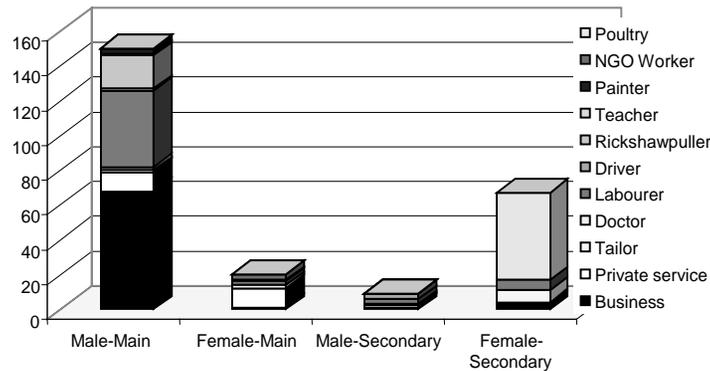

Figure 04: Primary and Secondary Occupation of Males/Females
Source: Field Survey, 2006
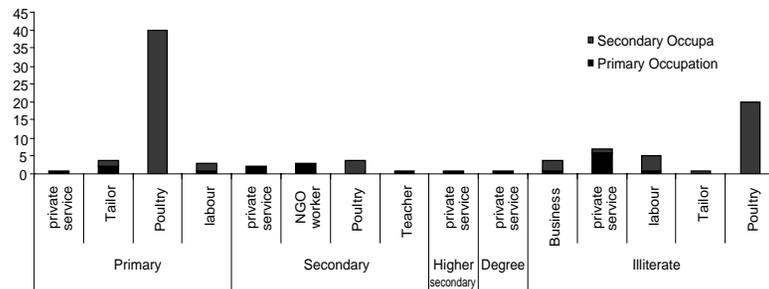
Figure 05: Education vs. Occupation of Female
Source: Field Survey, 2006
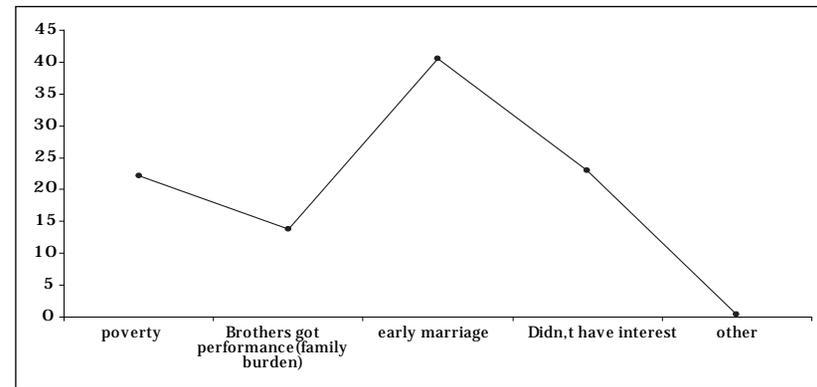
Figure 06: Causes behind not Continuing Education

Access to Education

Around 55.1% of the women have got the opportunity to study up to primary level but very few of them have continued up to secondary education level (only 12%). The respondents have expressed that only 2% of them have enjoyed full access to education while 63% have got partial access to achieve their educational status. On the other hand, 34% of the women in Khulna are not educated at all. Most of the women have faced unequal treatment from the family as well as from the society. A large number of women (40%) could not continue their education as they had been married at an early age. In spite of their willingness, they could not continue their studies. Interestingly, at least 22% of the women did not feel any interest to complete their studies. Such attitude may be influenced by social and family surroundings. In addition, the deprivation has not ended yet. It has been observed that at present the ratio of male and female school going children are 24:19.

Early Marriage

Another form of high inequality is reflected in the tendency of early marriage of the women of Khulna area. Figure below shows that most of the women got married between 12 to 15 years. It has been found that only 0.7% women got married when they were more than 20 years old while 63.3% women got married between 10 and 15 years and 36% got married

between the age of 15 and 20. 88% female were got married against their will and only females who were between 20 and 25 were given the chance to give their consent regarding their marriage.

Figure 07: Average Marriage Age of different Female Group
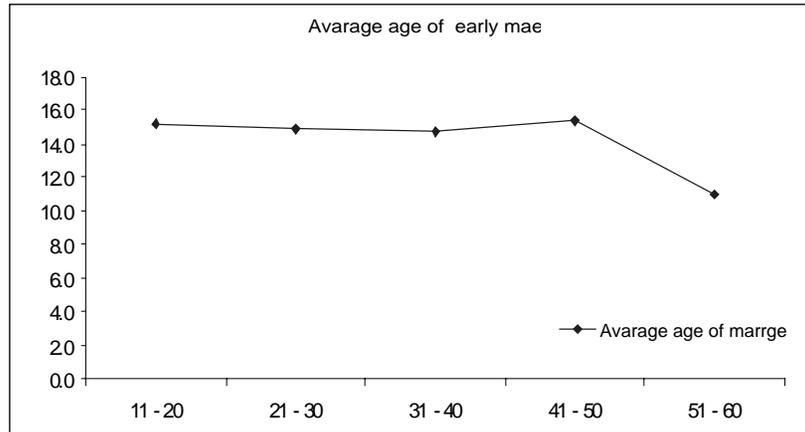
Source: Field Survey, 2006

59% of the female have expressed that they were not at all asked about the marriage because of the social custom and 26% has agreed that they were not asked due to lack of awareness on the issue. However, some of the respondents have argued that because of the poverty of their family, they did not have any scope to express themselves. Unfortunately, the attitude about early marriage has not been changed in recent decades. Those who are within the age of 50 or 60, they got married in around 45 years before (some where near 1960s) and during that period the average marriage age was 11 years. Unfortunately, at present the marriage age has increased very slowly to 16 years (Figure 07). It is also evident from the data base that the age gap between male and female has been 8.58 years with a range between 3 and 23. (The standard deviation is 3.11). Hence mental distance from their husband also puts females under enormous mental pressure and in most cases they are being dominated by their male counter part as they are not as matured as the males are.

Table 08: Age Specific Situation of Female on the Issue of Marriage

Age Range		Have you been consulted regarding your marriage		
		Yes	No	Total
10-15	Number of cases	3	92	95
	Percentage Within the age group	3.2%	96.8%	100.0%
16-20	Number of cases	14	40	54
	Percentage Within the age group	25.9%	74.1%	100.0%
21-25	Number of cases	1	0	1
	Percentage Within the age group	100.0%	0%	100.0%

Source: Field Survey, 2006

It has also been observed that the attitude for early marriage varies by regions. In Batiaghata the average age was 11 years but in other areas the case was worse and the average was as low as 6 in Rupsha followed by average age of 9 in some other Upazilas. Similarly the variation is observed in the case of religion. Hindus were given marriage between 11 and 19 years of age (Average 15.15) and Muslim female got married between 8 and 25 (14.84) years of age. Therefore Muslim women were found to be more discriminated.

Freedom of Opinion
In most cases the women of the region do not have the priority in their household in spite of being a very contributing member in the family. None of the families sampled were found to be headed by a female but some of them have the opportunity to give opinion (59.3%). Their opinion is taken into account mainly on the issues of regular family activities (97%) and child bearing (80%) activities. Interestingly, their opinion is rarely taken on the matters which are conducted by their husband (1% of the women). On the other hand, 14.1% women cannot even give any opin-

ion. They cannot express themselves since there is no value of their opinion (61%), they are not fully aware about the issue (49%), social custom do not allow them to talk (13%) and religious superstition (27%). It was also found that those who are less educated have less opportunity to express themselves. 53% have primary education and 33% are illiterate among the women who do not have the opportunity to express their opinion.

Reproductive Decision

On most occasions, female had no consent (61%) on the issue of reproduction and some of them are even forced to take a child (9%). However, 25% women took the decision by mutual understanding and only 0.7% women enjoyed the freedom of deciding about reproduction.
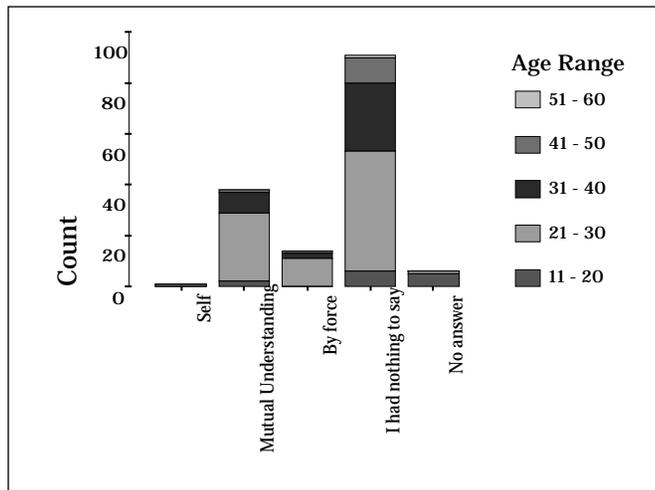
Figure 08: Age Specific Reproductive Decision of Female

Source: Field Survey, 2006

Ownership of Property

The study found that 99% of the respondents have property. Among them 67% of them have land and rest 32% have ornaments as their assets. Most of the property was inherited from parents (73.4%) or

gifted by husband (17.7%). Only 11.4% have bought their assets with their own money. All of them are working women and most of them (44%) are within the income range of Tk. 100 to Tk. 1000. 22% female have control over their lands and they keep the control mainly by family maintenance (18%), while the rest have given away lease (4%). On the other hand, 78% female do not have any kind of control over their assets. It has been observed that in most cases brothers (43.5%) enjoy the property and fathers (30%) or husbands (28%) also enjoy the property. It is evident that less educated women have less control over their property. In fact, they have lost control as their mobility is restricted. They have lost control also due to the dominance of the males (Figure 09).

Equal Rights as Women

82% of the female are not enjoying the equal rights in the society in Khulna city. Women who are above 40 are the most deprived (More than 90% do not enjoy the right) but women below 40 are also very near to the situation of aged women (above 80% do not enjoy right).

Figure 09: Reasons behind loosing Control over Property (in %)

Source: Field Survey, 2006

Table 10: Consent on the Access of Women to Equal Rights and Privileges

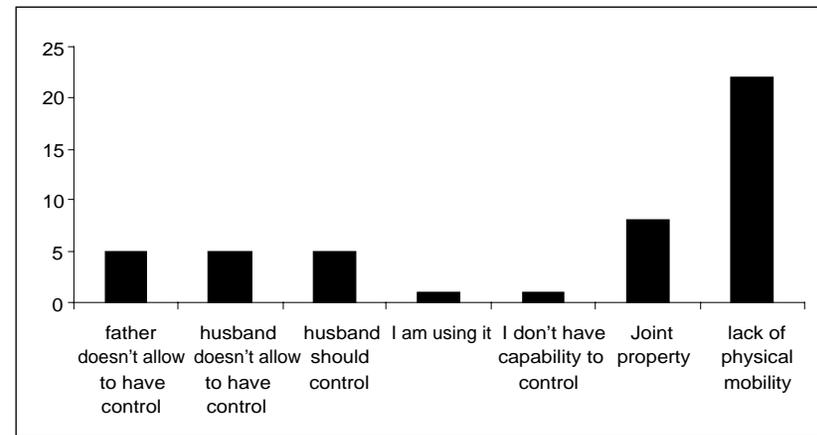| Age of the respondent		Frequency	Percent
11 - 20	yes	2	15.4
	no	11	84.6
	Total	13	100.0
21 - 30	yes	15	17.2
	no	72	82.8
	Total	87	100.0
31 - 40	yes	8	21.6
	no	29	78.4
	Total	37	100.0
41 - 50	yes	1	8.3
	no	11	91.7
	Total	12	100.0
51 - 60	no	1	100.0

Source: Field Survey, 2006

It has been observed that those who earn more than Tk. 3000 enjoy equal rights and privileges in the society (100%) followed by those who earn between Tk. 1001 and Tk. 2000 (33%). However, lowest income group are most deprived (16.3%). Therefore, it can be concluded that there is a direct relation between social rights and income status.

Economic Emancipation

90% of the female have agreed that they should have economic emancipation and it has been seen that regional variation about consent on economic freedom is not significant (have ranged between 17% and 22% of total response). However, highly educated people want more economic emancipation than the others. Also, those who earn more than Tk. 1000 have given their consents for economic emancipation. Most of them said that full access to education and reduction of early marriage are the most important factors that are hindering their economic emancipation (Figure 10).
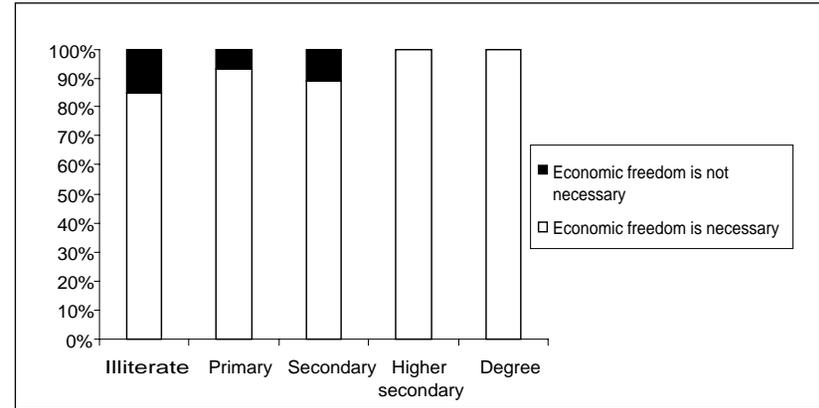
Figure 10: Economic Emancipation According to Different Educational Status

Source: Field Survey, 2006

Findings of the Study

The findings of the study clearly suggest that there are gender disparities throughout Khulna district. Based on the analysis of primary data, it can be concluded that gender disparity in Khulna district is spread out in all spheres of social and family lives.

The analysis of economic status reveals that the financial contribution of women in a family is very limited. This is evident from the fact that average income of the male members of the family is far greater than those of the female members. It was usual that those who had some access to education had some mentionable income. The problem was that most of the women are engaged in informal in-house economic activity which usually generates a very low level of income. Hence, they can't also have any importance in decision making process inside the family. In addition, their excess labor in household activities is not at all considered as a contribution to the family. Moreover, it was found that educational qualification doesn't influence the job selection decision, because some of the literate women were found to be engaged in some jobs where their educational backgrounds were of no use. Hence, it is visible that their academic background has been underutilized and it was because they have very limited mobility.

The access to education for the women in their childhood was also very

limited. Some of them had some flavour of education, but many of them could not continue their education up to a desired level. Almost one-third of the respondents could not have any access to education at all. And 40% of those who got access to education had to stop going to school after primary education because they had early marriage. 15% of them could not continue their education because their brothers got preference. Interestingly, a little over 20% woman didn't have interest for education at all. This was because the social custom and their surroundings made themselves to think that education might not create any value for the girls.

Another form of high inequality is reflected in the tendency of early marriage of the women of Khulna area. More than 60% of the women got married at the age below 15. Only those who got married between 20 and 25 years were given the chance to give their consent regarding their marriage. Most of them said that they were not even asked about their marriage because social custom doesn't allow them to express themselves. They also feel that it was because of the lack of awareness. Unfortunately, the attitude about early marriage has not been changed in recent decades. It is also evident from the data that the age gap between male and female has been 8.58 years with a range between 3 and 23. Hence, mental distance from their husband also puts females under enormous mental pressure and in most cases they are being dominated by their male counter part as they are not as matured as the males are.

Most of the women of the region do not have any priority in their family in spite of being a very contributing member in the family. Their opinion is taken into account mainly on the issues of regular family activities and about their children. In case of the matters which are conducted by their husband, their opinion is rarely taken. Most unfortunate thing is that the women feel that this tendency is very much usual and acceptable since it is created by the society as a whole. As such, it is clear that the awareness of females about their social and family rights is very low in the study area. It was also found that those who are less educated have less opportunity to express themselves. On most occasions, female had no voice on the issue of reproduction and some of them were even forced to take a child.

The study found that most of the respondents have property, but very few of them have purchased those by their own. Most of the property was inherited from parents or gifted by their husband. Moreover, they do not have control over their properties. The controls were usually in the hands of the male members of the family. It was also evident that less educated women have less control over their property. In fact, they do not have control as their mobility is highly restricted and also due to the dominance of the males. Interestingly, most of the women do not have any complain about their loosening control on their own property.

Policy Recommendations

Based on the findings of the study, the following recommendations can be put forward:
·   The country is already under the policy of compulsory and free primary education. As such the primary enrolment rate is getting higher. But the problem still lies with the drop-outs. Government should take appropriate steps to reduce drop-outs from subsequent levels of education to ensure full access to education for the girls especially in the rural areas. Such steps would have direct effects on the improvement of the socio-economic status of the females.
·   Early marriage has been found to be one of the basic reasons for backwardness of the women of the country. Necessary measures should be taken to stop early marriage of the deprived women. Creation of mass-awareness can be the first step in this regard. It is also necessary to increase their access to mass communication such as radio/TV, which can provide adequate information on this and other issues. Moreover, arrangement of some cultural and/or other programs in rural areas might also be useful in such cases.
·   Government and private initiatives should be increased to promote women empowerment with emphasis on human resource development, skilled manpower and social mobility; these things will be added with the provision of micro finance that would enable the poor women not only to undertake income generating activities but also to forms other components of increased empowerment.
·   It is important to promote the equality in the household activities. This might increase the equality in all spheres of life as a whole. In this regard, household responsibilities should be shared so that women can participate in economic activities to increase their economic as well as social empowerment.
·   Efforts should be made to increase mass-awareness about the demerits of illiterate and inactive women in the family. Electronic and print media should increase their programs on theses issues so that rural families can understand the importance of full participation of women in all spheres of life.

Conclusion

The assumption that men are the breadwinners and women are dependent on them is dominant in Bangladesh. Although women perform a lot of important tasks, those are not considered as economic and productive activities. There is no automatic inclusion of gender equality concerns in the government policy and plans irrespective of its potential. The government of Bangladesh is trying to reduce gender disparity by enhancing the strategies to increase the participation of women in economic activities. Nevertheless, the Ministry of Women and Children Affairs is weak and suffers from limited resources. Policies of line ministries in Bangladesh hardly reflect women's needs and interests. A strategy of mainstreaming in support of gender equality continues to seek changes in the conceptualization of 'development' in the institutions that promote development and administer resources, as well as in personal relationships. These changes will not be achieved easily and will take time in Bangladesh. So far, we have neither sufficient nor successful implementation of policies to reduce gender disparities from the government side. The only, though very little, success story regarding this issue can be attributable to some of the leading NGO's in Bangladesh who are trying to bring the women outside of homesteads and to engage them in the economic activities as well as to combat violence against women.

Non-government organizations (NGOs) have emerged as an integral part of institutional structures for addressing poverty as well as rural development, gender equity, environmental conservation, disaster management, human rights and other social issues. In order to support social and economic empowerment of the poor, NGOs have widened their activities to group formation, micro credit, formal and non-formal education, training, health and nutrition, family planning and welfare, agriculture and related activities, water supply and sanitation, human rights and advocacy, legal aid and other areas. In effect, they are making an active contribution in every sector. In respect of poverty alleviation, the principal instrument of NGOs is micro credit, skill development and employment generation. It is estimated that nearly 80% of Bangladeshi villages are now contributors in NGO activities. About 1000 NGOs are engaged in microfinance operations. The overwhelming majority are small but a few large NGOs are ASA (Association for Social Advancement), PROSHIKA, Grameen Bank (GB) and BRAC (Bangladesh Rural Advancement Committee, which is currently the largest NGO in the world). They are influential and their contributions are significant in Bangladesh's

National Economic Growth. Analyzing the empirical evidence, it is undoubtedly clear that NGOs' efforts for women's empowerment are apparently intense, but the level of poverty alleviation is still unsatisfactory. There has been neither sufficient study nor appropriate policy implementation in Bangladesh to resolve the ongoing problem of gender disparity. This study is significant because it provides methods and ways to enable governments and NGOs to more effectively integrate women into participatory development processes, where women can participate equally in economic activities and share equally in opportunities for a rapid economic growth in Bangladesh. The study has examined and analyzed the key social factors that are responsible for the existence of gender disparity (why there are gender disparities) in Bangladesh and how they are hindering women's equal participation in all spheres of life. Experience suggests that gender bias is more prominent in rural areas for which reason NGO activities are centralized in rural Bangladesh. As a consequence the study focuses on rural areas. Since government is trying to remove the gender inequality in Bangladesh, it is important for them to understand and/or find out the extent to which this problem is prevailing. In addition, understanding the reasons behind would also be of great help for the policy makers to formulate required policies to remove this problem. Moreover, the social workers (NGOs') may also use the findings of this research in order to facilitate their social development programs in which large number of women are expected to contribute a lot.

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Human Resources Development: Beyond Western Paradigm?

Muhammad Ruhul Amin*
Dr. Muhammad Asadduzzaman**
Nafisa Rashid***

1. Introduction

Importance of human resources development (HRD) has always been emphasized and stressed by the economists of all times since the very development of Economics as a systematized body of human knowledge. Adam Smith, in his famous book "The Wealth of Nations," has specially mentioned about it and included, "acquired and useful abilities of all the inhabitants or members of a society" in his "fixed capital".[1] Alfred Marshall known to be the father of Modern Economics emphasized the importance of education as "a national investment" and according to him "the most valuable of all capital is that invested in human beings".[2]

Paul Streeten et. al. (1981) recognized that there is a growing concern about the unevenness of progress and the evident deterioration in the human conditions in many parts of the world. In fact the fancy development models, such as Trickle Down Theory, Redistribution and Growth, Basic Needs Theory etc. could not produce the desired goals. In many cases, the fancy models produced ugly facts of starvation, social disintegration and deprivation. Therefore, the development experts in recent years discovered that the people are the means and end of all development and emphasis has been to develop the individual in totality. The purpose of this chapter is to construct a paradigm of human resources development from a non-Western perspective. What is development? What are the major concerns and ingredients of development? How to construct a non-Western paradigm for human resources development of Bangladesh? What are

*   **Associate Professor, Department of International Relations, University of Dhaka**
**   **Professor, Department of Public Administration, University of Dhaka, Ex-Chairman, University Grants Commission of Bangladesh**
*** **Senior Lecturer, School of Business Studies, Southeast University**

the salient features of the constructed non Western paradigm? Are they conducive to the development needs of Bangladesh? What are the issues and challenges in the implementation of this non Western theory for human resources development of our country? These issues are addressed in the present chapter.

The present chapter is divided into five sections. Section one deals with an introduction, construction of a non- the conceptual analysis of the term 'development'. Section two focuses on the Islamic analysis regarding relationship between "human resources" and "development". Section three explains major ingredients of human resources development in Islamic framework. In section four, the implications of the Islamic way of human development model for Bangladesh development is examined. Finally our discussion comes to an end with some concluding remarks.

1.1. Towards a Non Western Paradigm for HRD

From the dawn of civilization, human resources had been considered an important factor for development. The administrative authorities as well as the economists are therefore, quite cautious of the proper utilization of the human resources. In order to make the most effective use of this factor, the Western developed nations have found out scientific ways and means. One of the objectives of those methods is to select right man in the right place. In recent years, devices to select right man for right position through 'Professional Guidance and Counselling Programs' and by various examinations and tests have also been innovated as a result of which the scope of proper and maximum utilization of human resources has become easy and wide[3].

The Western development models have widely talked about development theories for individuals at all strata of society. These models include education, health, social values, basic needs, equality and so forth. In order to maintain HRD a number of studies and literatures have been written in the Western World. Despite immense contribution of these Western theories to HRD, however, the overall objective of human resources development in the Muslim World has not been fully implemented. Thus the Muslim countries including Bangladesh failed to provide strong Human Development Indicator (HDI). The author believes that the Muslim countries need to reshape the paradigm for their human resources development. Since HRD closely related to the socio-cultural ethos of a certain community, the author believes that Islamic religion which is the most powerful deter-

minant of the culture of a Muslim nation like Bangladesh can contribute significantly to the construction of an innovative paradigm for HRD. This does not necessarily alternative paradigm will be anti-Western: mean that this new theory may incorporate the elements of Western paradigm that are compatible to Islam and at the same time the new theory may not an anti-thesis of the Western paradigm.

Since Islam is the complete code of life, development may be sought from the Islamic point of view. This chapter identifies the inadequacies of all previous models of development and suggests how human development can be organized in an Islamic perspective. Ours is a very poor country. It is our paramount duty to find ways and means for the development of our country. But how? We strongly believe that the Islamic way of human resources development will make our country a prosperous Bangladesh. The principal objective of this work is to examine the Islamic perspective of human resources development and to explain its implications for the development of Bangladesh.

1.2. Development: The Conceptual Framework

Development is, perhaps, the most popular and widely used term of this century. Since World War II, it has been the main agenda of modern governments. Since the early 1950s, the idea of development has undergone considerable modifications. The conceptual basis for development during the 1950s and 1960s came from the dominant modernization paradigm. Development was often equated with modernization, a process of change towards those types of economic, socio-cultural and political systems developed in Western Europe and North American. Economically, modernization implies industrialization, urbanization and the technological transformation of agriculture. Socially, it involves the weakening of traditional ties and the adoption of achievement, as a basis of advancement. Culturally, modernization implies increased secularization of society. Politically, it refers increased political awareness and participation in democratic systems[4].

Seers (1981) has identified a number of development criteria or objectives for development, such as adequate family income, availability of jobs, increasing literacy rate, mass participation in government and complete national independence[5]. According to Streeten (1972), development means modernization. Development as an objective and development as a process, both embrace a change in fundamental attitudes in social, cultural

and political institution[6].Clearly streeten's concept has evolved into what is known as "the basic needs" approach to development[7].Thus strictly speaking the concept of development should be understood in multidimensional context involving the reorganization and reorientation of the entire social system. Operationally Development means: (1) in politics, a stable democratic process and universal suffrage, (2) in economics, high aggregate economic growth (GNP), high mass consumption and high level of industrialization; (3) in social realm, mass literacy, high social mobility based on skills had social differentiation; and (4) in psychological orientation, a strong motivation for achievement, investment and savings as well emphasis on inner worldly values[8].

Although in the fifties and sixties, emphasis was given on an increased production, meeting basic human needs gained priority in the seventies. The development goals in the eighties included, among other things, alleviation of poverty and reduction of social inequality. In the 1990s some new concerns have gained prominence in the development thinking. Currently development is viewed to be a process that seeks to increase the income of the poor through sustainable and productive activities and emphasizes on more qualitative aspects which were previously overlooked: such as self reliance, empowerment, participation, and human resources development. While the earlier conceptualization of development is regarded as goods- oriented view of development[9], what is currently being proposed can rightly be termed as "people-centered development"[10].

2. "Human Resources" and "Development": A Non- Western Paradigm: An Islamic Analysis

The main thrust of human resources development is that it is the lives that human beings lead that is of intrinsic importance, not the commodities or income—that they possess. Human development is defined as "a process enlarging peoples choices in terms of desire to lead a long and healthy life to acquire knowledge and to have access to resources needed for a decent standard of living"[11]. Islam provides a balanced explanations of development where the concept of development encompasses both moral and socio-economic aspects of man's life. Islam argues that development should be sought based on the enshrinement of moral human values which is number one pre-requisite for achieving socio-economic development.

Islam emphasizes on the development of the moral values of mankind. The Maudju (subject matter) of the Holy Quran is: 'Man'. The principal

objective of sending Prophets by Almighty Allah is to produce 'perfect man'. The Revelation has come to teach purity and wisdom. Allah said:" It is He who has sent amongst the unlettered and Apostle from among themselves to rehearse to them His Signs, to sanctify them, and to instruct them in Scripture and Wisdom, - although they had been, before, in manifest error"[12]. This divine project put forward by the Almighty through His Prophets is labelled as 'Tajkiah' (Sanctification) which implies that 'man' is the main engine of development, if he is instructed and trained in the Islamic way.

The Islamic idea of development is thus closely linked with the concept of "Tajkiah' because it encompasses all aspects of human character and tries to enhance 'growth' by refining soul, rectifying socio-economic relations and eventually attaining 'completeness', which ultimately result in the welfare of this mundane world and in the betterment of hereinafter[13]. Islamic model of development, however, focuses on the enrichment of physical, moral, social and cultural aspects of man's life. There is a smooth relationship between world and economic development. In other words, moral development directly affects economic prosperity. Development is defined as a deliberate human efforts for change – change towards desirable situation[14]. Development in Islam is a comprehensive program which involves material progress as well as spiritual well-being[15].

Thus Islamic development model which is explained through human resources development provides a very wide and all embracing phenomenon, that begins with the development of the "self" and "spirit" of a man and ends with the achievement of the complete success in socio-economic, political and cultural spheres of human life. In the Holy Quran, Allah has mentioned about iron which has got many beneficial uses for mankind[16]. For producing iron from the iron ore, one has to apply appropriate "Hikma" (technology) in order to make the production process efficient. He is to put in 'Sayee' (hard labour) in his endeavor. In this way when something is produced through co-operative efforts, the product is needed to be distributed among the participants with "Adl" (Justice) and "Ihsan' (human considerations)[17]. This necessitates a system of political authority for decision-making and its execution. Again, so that the decision of the political authority may be just or welfare-oriented, there is a need for an institution of 'Shura' (mutual consultation). Therefore, knowledge, technology, hardware, participatory decision-making, distributive justice etc. constitute a mutually dependent process which leads a soci-

ety of development, justice and peace. In all this long and arduous journey, mankind needs certain guiding principles for sustainable functioning of the process. The Holy Quran has given specific directions regarding this[18].

3. Human Resources Development in an Islamic Framework: Major Ingredients

There is a number of ingredients of human resources development. In various places of the Holy Quran, the Almighty emphasizes upon 'Iman' (faith) and 'Amal' (action). He said, "By time, verily Man is in loss, except such as have faith and do righteous deeds and join together in the mutual teaching of Truth and of Patience and Constancy"[19].

Here we can understand that if life is considered under the metaphor of a business bargain, man, by merely attending to his material gains, will lose. When he makes up his day's account in the afternoon, it will show a loss. It will only show profit if he has Faith, leads a good life, and contributes to social welfare by directing and encouraging other people on the path of Truth and Constancy[20].

It is not possible for man, to acquire 'Faith' and righteous deeds' without possessing knowledge about life. As one of the most important aspects of human development, emphasis has been given on 'education'. In His first direct Revelation to the Holy Prophet, Allah said, "Read in the name of thy Lord and Cherisher, Who created"[21]. Here 'Iqra'(read) provides a very comprehensive meaning which refers not only to a particular person and occasion, but also gives a universal direction. And this kind of comprehensive meaning runs throughout the Quran[22]. Thus education has been declared compulsory (Fardj) by the holy Prophet (SM). It is a great sin that a man remains uneducated.

It is a matter of great regret that the Muslim world is nowadays massively devoid of education. When the question of education comes, there runs a common feeling that the western World has reached the zenith of knowledge and wisdom. But again their education is directed to achieve material gains where there is a total absence of 'soul' and 'spiritual enlightenment'. As a result, their students have powerful images of what a perfect body is and pursue it incessantly. But derived of literacy guidance, they no longer have any image of a perfect soul and hence do not long to have one[23].

On the other hand, there exist two systems of education in almost all the

muslim countries: (1) Shariah based traditional system of education where the students have the opportunity to learn religious and spiritual training. But they do not have any opportunity to play any role in government and administrative sections because of their lack of worldly education; (2) Secular system of education where the students have the opportunity to learn all branches of knowledge. But they do not have any opportunity to be enlightened with religious and spiritual knowledge whereas they play active role in socio-economic and political administration of their countries. As a result of this dichotomy, the system of education became a means of dividing the Ummah and draining its energy. In reality, education should be a means of bringing Muslims together and providing them with a unified cultural perspective, directing them towards progress and construction. It should create harmony and provide a common purpose, thus directing all efforts towards developing righteous Muslims whose mind and soul, culture and behavior[24].

Islam emphasizes on such an education system which provides man the opportunity to achieve benefits in both worlds here and hereinafter. Al-mighty Allah has taught Muslims to pray for the welfare of this world and the world after death. According to Islam, since man is the vicegerent of God, it is obligatory that he knows law to govern this world. So, it is compulsory for him to learn all branches of education so that he might successfully govern the world and with this end in view Islam suggests that man should completely embrace Islamic direction of education where Islamic Shariah does not exclude the modern branches of knowledge. Thus Islamic education program is directed to attain religious and spiritual fulfillment as well as to achieve socio-economic development.

Along with education, the next importance has been laid on achieving economic well—being. No doubt, Islam is opposed to monasticism, and views the economic activities of man as quite lawful, meritorious and sometimes even obligatory and necessary. It approves of the economic progress of man, and considers "Lawful or righteous livelihood" (Kasb Halal) as "an obligation next to the obligation" (Faridjah badal Faridjah) that is to say, an obligation of the secondary order[25].

Notwithstanding all this, it is no less a truth that it does not consider "economic activity" (Maash) to be the basic problem of man, nor does it view economic progress as the be-all and end-all of human life[26].

The fundamental principle is that 'wealth' is a thing created by Allah and is His property. The right of property over a thing which accrues to man is delegated to him by Allah. The Holy Quran (24: 33) explicitly says: Give to them, from the property of Allah which He has bestowed upon you"[27]. The distribution of wealth is one of the most controversial issues concerning the economic life of man. It has been centre not only of fervent debates, but even of armed conflicts. Islam has made the appropriate solution to this problem. The system for the distribution of wealth laid down by Islam envisagegs three objects[28].

The first object is that it would be the means of establishing in the world a system of economy which is natural and practicable, and which, without using any compulsion or force, allows every individual to function in a normal way according to his ability, aptitude and choice so that his activities may be more fruitful, healthy and useful. Allah said "we have distributed their livelihood among them in worldly life, and have raised some above others in the matter of social degrees so that some of them utilize the services of others in their work"[29].

The second object is to enable everyone to get what is rightfully his. Under non-Islamic economic systems, only those factors that have taken part in the process of production, are entitled to share in wealth, and no one else. According to the Islamic point of view, not only those, who have participated in the production, but those too whom Allah has made it obligatory upon others to help, are the legitimate shares in wealth. Hence the poor, the helpless, the needy, the paupers and the destitute they too have a right to wealth. Allah says: "In their wealth there is a known right for those who ask for it and those who have need for it."[30]

The third object of the distribution of wealth is that wealth instead of becoming concentrated in a few hands, should be allowed to circulate in the society as widely as possible, so that the distinction between the rich and the poor should be narrowed down as far as is natural and practical. Allah said: "what God has bestowed on His Apostle from the people of the townships, belongs to God, to His Apostle, and to kindred and orphans, the needy and the wayfarer; in order that it may not be confined only to the rich amongst you"[31].

Another important aspect of human resources development is to build up moral values. There may be four stages of developing these values[32]. The first and the foremost among them is Iman (faith) which is the foundation of human life. It includes 'Tawheed' (belief in one and only Allah) and

'Risalat' (belief in the Prophets). The second stage is 'Islam' (deeds). As soon as a man is enlightened with 'Iman', certain specific duties become obligatory upon him, that include 'Salat' (daily prayers), 'Saom' (fasting, once a year), 'Zakat' (compulsory economic assistance to the poor), and 'Hazz' (visiting holy Kaba). The third stage is 'Taqwa' (fear of God) which compels and inspires man every time to follow the guidelines and instructions of the Almighty. The fourth stage is "Ihsan' (deep love to God) which inspires man to develop his moral character. If a man can successfully observe these four stages of development of moral human values, he will be able to fight shy of all obscenities and indecencies, such as pride, selfishness, deception, bribery, corruption etc.

4. Islamization of Human Resources Development in Bangladesh : Constraints and Opportunities

Bangladesh combines extreme poverty with the highest density of population in the world. Although poor both in physical and financial resources, she is richly endowed with human resources. But unfortunately due to our low level of education and skill formation, in the past, our human resources could hardly play an effective role in promoting growth of our economy. Acute poverty and growing inequality in Bangladesh, has brought the issue of human resources development at the focus of our development planning. The second in the list of three critical objectives of the 'Perspective Plan' is: "Alleviation of poverty and generation of employment opportunities through human resources development"[33].

As human resource development may thus directly or indirectly serve all the three crucial objectives of the Perspective Plan of Bangladesh (1990-2010) - growth, poverty alleviation, and increased self reliance it deserves utmost importance in any strategy for development of Bangladesh[34].

In order to achieve growth, alleviate poverty and increase self-reliance, human resource must be developed and with this end in view the first priority would be given to education. It is clear that due to the lack of education, our population seem to be huge burden on our nation. One of the most important questions for the countries where high rate of population growth is considered as constraint for economic development refers to education. Islam addresses us to cultivate knowledge throughout the whole life from cradle to death. From Islamic point of view, any attempt that aims at our human resource development implies the process of increasing human knowledge, the skill, abilities and capacities of the people

to perform desired and necessary economic activities for productive purposes. In economic terms it may be described as the accumulation of human capital for development purpose. From the political standpoint human resource development prepares favorable ground for the adult people to actively participate in political processes and activities of the economy particularly in running the government administration democratically as good and responsible citizens. From the social and cultural points of view, the development of human resources help people lead fuller and richer life.

Thus education has been accorded a high priority as an instrument for human resources development and alleviation of poverty, and for this, programs have been taken up for development and expansion of primary (1 to 5 grades), secondary, (6 to 12 grades) and higher education. Primary education has been made universal as well as compulsory and free. Primary education was made compulsory through an Act in 1990. A separate Division in the name of Primary and Mass Education Division was created in 1992. A program for "Education for All" by 2000 AD. has been taken up to increase enrollment at the primary level to 95%, from the present enrollment of 92%. For expansion of education, new schools are being established and the existing ones developed or rehabilitated. The number of primary schools is increasing and the total number of schools which was 47241 in 1990 increased to 59894 in 1995. The enrollment of students at primary level is also increasing. Total number of students enrolled in 1990 was 12.05 million, which rose to 17.20 million in 1996. For higher education and training, institutional facilities are also being developed. They relate to schools/colleges at secondary level, Madrashas, Universities and technical and vocational training institutions.

The Open University established in 1992 carries out educational programs for those who fall outside formal schooling. Educational facilities are also being developed in the private sector which include universities and medical colleges. It indicates that the number of secondary, higher secondary, technical and vocational institutions, and their teachers and students is increasing. It also suggests that the number of educational institutes, teachers, and students in higher education level has increased.

Despite all these efforts to develop our education, there exists a basic defect in our education system. This is why a redefinition and rethinking of our education system has become the demand of time. Therefore, in order to produce educated human resource, our total education system

should be restructured. Like many other Muslim countries, there are two systems of education in Bangladesh: Madrasah system and Secular system. While Madrasah education focuses on mainly moral and spiritual training, Secular education emphasizes on material and worldly development. The Madrasah educated people normally can not take part in administrative sectors of our Government due to lack of worldly knowledge and so, these people directly can not play role in various development activities. The Secular educated people on the other hand occupies important positions in the administrative sectors. But owing to their lack of moral training, these people normally become involved in corruption and other obscenities in various spheres of life and so, the expected development objectives can not be achieved. By restructuring our education system, we may introduce a new system where religious and moral training may be injected in all branches of knowledge—Natural Sciences, Arts, Social Sciences, Commerce and Engineering etc. Thus our population which is now a burden may be converted to the most important national resource which will ultimately enhance our development program.

Bearing in mind the above analysis of Islamic perspective on human resources development, it is crystal clear that from the Islamic point of view, human resources can properly be utilized for economic development. The Holy Quran has given clear instructions about what modern Psychology calls 'Professional Guidance and Counseling" devices and by which proper and skilled workers for any job are produced. In Islam, the main function of the persons engaged in 'Professional guidance and Counseling' is to find and point out the inherent or inner qualities and potentialities of individuals and to make arrangements for their cultivation and development[35]. As already mentioned, the main objective of Islamic education is to produce man in the real sense of the term. We may introduce a 'Professional Guidance and Counseling' division under the Ministry of Cultural Affairs and if it can be made possible to create and develop various abilities and skills within our people it will not at all be difficult to select right persons for any job. In an Islamic society a group of persons always remain engaged in advisory works. They help solve any problem faced by any individual and guide him in the right path.

In modern economic activities much importance has been given on production. But to increase production, what is more important is to maintain humanly relation in the working fields. From the traditions of the holy Prophet (SM) and from the examples of the early Caliphates it may be clear about what type of relations should exist between the employers and the employees. It may create a congenial working environment which will eventually lead to an increase of production.

Corruption and irresponsibilities in economic activities also give rise to various problems which retard economic development. Our discussion regarding human values clarified that only by nurturing those moral virtues, man can overcome corruption, irresponsibilities and all other vices. When a faithful Muslim involves himself in any work, he does it for the satisfaction of God with a mind that God is present before him observing his deeds and so an honest and God-fearing Muslim cannot, in any way, indulge himself in any immoral or unjust activity. It is our humble recommendation that Islamic path of development will lead our country most rapidly to political stability, economic prosperity and social security. But to execute this model is not without difficulty. A number of constraints may nip all the efforts to establish Islamic model in bud.

First, the inadequacy of the study on Islam among the modern educated persons - intellectuals, journalists, university professors etc. Only a few 'Ulema' (Islamic scholars) of our country are well versed in Islamic knowledge. But again they massively lack in the comparative study of Islamic and other systems. While the modern educated persons, are highly qualified in different branches of knowledge, they largely lack Islamic knowledge. This contradiction seems to be the major obstacle.

Second, except for one or two, no country of the Muslim World has so far examined Islamic model for their development. Long colonial domination of Muslim countries made them highly undeveloped or underdeveloped. These countries are now facing a sort of 'cultural' or 'ideological' crisis. Most of the leaders of these countries are educated in Western system or directly in the West which created a widespread idea among them that Islamic model is outdated and irrelevant.

Third, Muslim concentrated areas of the contemporary world are generally identified as backward societies. Although this is the result of Western colonial rule and the reality of present international system led by the west, many western scholars like Max Weber, David C. McCelland, B. K. Parkinson and C. R. Suteliffe etc. blame Islam as obstacle to development. Studying their writings, our brilliant scholars became convinced that Islamic system is antithetical to development and irrelevant in the context of modern era[36].

5. Conclusions and Recommendations

In the foregoing sections of this paper we tried to examine the relationship between human resource and economic development. The experts on Economics, Sociology and other branches of Social Sciences have discovered different development strategies. We have clearly mentioned that almost all these models are proved to be inadequate or Inappropriate and so, in the nineties, they have found out the most significant strategy which goes by the name of human resources development model. We have also described how Islam has taught man to develop and administer his inner potentialities. Considering all these realities we recommended Islamic model of human resources development and examined its relevance to the development of Bangladesh. In section four we have identified a number of problems facing the application of Islamic model of development to the context of our country. Now it is worthwhile to devise the ways and means so that those obstacles be overcome and the country could achieve the desired development goals.

The first and foremost among them is that our Government should take necessary steps to apply Islamic model for development. But first of all our education system should be restructured in such a way so that real man may emerge from the system. Our educational institutions will produce doctors, engineers, scientists, poets, litterateurs and artists who will employ their specialized knowledge for the satisfaction of God: and as God becomes more satisfied with the works done for the well-being of mankind, so it is expected that the persons educated through Islamic education will involve themselves in such welfare activities which will ensure the establishment of an welfare state. One more point to be noted that the economic life constitutes a mere part of the whole Islamic way of life. Islam is a complete code of life. If we want to see Islamic economic system established we shall have to work for establishment of the whole system of Islamic way of life. Islamic code is a model not for the Muslims only, but it is an ideal for the whole mankind of the world[37]. Once it is established the whole mankind may enjoy peace, prosperity and security.

Second, the research institutes like Bangladesh Institute of International and Strategic Studies (BIISS), Bangladesh Institute of Development Studies (BIDS), Islamic Economics Research Bureau (IERB), Bureau of Economics, Centre for development and Research in Bangladesh (CDRB), Center for Policy Dialogue (CPD) may play active role in conducting research in this field and thereby creating experts on Islamic system, they can contribute a lot for the attainment of our development goals.

Third, our Government may introduce a 'Human Resource Development Cell' under the Ministry of Religious and Cultural Affairs. Through a "Professional Guidance and Counselling" division under the same Ministry we may get the most qualified personalities in various fields.

Fourth, we may introduce "Moral and Religious Training Program" under the BCS Training Academy which will cultivate the morality among our young BCS cadres upon whom the great responsibility of our nation has been bestowed. Enlightened with the moral and religious training, they may despite all sorts of limitations, successfully run the country without being indulged in bribery, irresponsibility, corruption and other obscenities.

Finally, there should be significant awareness among mass people regarding the importance of the Islamic model for out country's development. Radio Bangladesh, Bangladesh Television, Newspapers and other Information Media may contribute a lot to create mass awareness. Although the road towards Islam is tortuous, but the prospect is bright.

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