Economic Potentials of Women in Small-scale Fisheries in West Africa

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Abstract: In the past three and a half a century since fisheries development was embarked upon in West Africa, the significant contributions of women in sustaining the socio-economic livelihoods of their families has been neglected and taken for granted. Development and support systems have paid much less attention to the economic potentials of women in small-scale fisheries in West Africa. Women in developing economies, especially in Africa lack access to services such as credit, fisheries extension, technology, information and basic education which are critical for shifting patterns of fisheries production or increasing output, all these are limited. Research information on the role and extent of women's involvement in agricultural and/or fisheries development process show a genuine desire to improve their socio-economic status. However, by a combination of factors, women could not break through the cycle of poverty. There is therefore need for the support systems to be organized in a way that should bring about social changes that may be resisted at first, but will eventually promote the role of women in the economy. Gender relations should not be seen as competitive but rather as complementary and mutually reinforcing. General recommendations include: training and extension programmes in fisheries targeting women in areas where they contribute to fisheries activities like processing, packaging, distribution and marketing; microcredit programmes to benefit women; networks formed at national level with the active participation of all the stakeholders.

Keywords: women, small-scale, fisheries, potential, extension, training, and support system.

Introduction

The measures to enhance the participation of West African women in small-scale fisheries in terms of social and economic life are influenced by laws and customs of the society in general. However, the nature and impact of modern education as well as the limitations placed by the legal and economic factors have a greater contribution on the status of the women.

There are approximately 16 countries covered by the West African Economic group. Thirteen of them are maritime countries located on the East Coast of the Atlantic Ocean. Their shoreline is estimated at 6,4000 kilometer square with a total continental shelf of 310,050 kilometer square. The artisanal fishing maritime zones range from 3-12 miles depending of course on the country, according to the United Nations Convention on the Rights of the Sea. The maritime countries are: Benin, Cameroon, Cape Verde, Cote d'Ivorie, Ghana, Gambia, Guinea, Guinea Bissau, Liberia, Nigeria, Senegal, Sierra Leone and Togo. The 3 landlocked countries are: Burkina Faso, Mali and Niger.

The total production in the area of intervention for the West African region is approximately 1.6 million metric tones per year of which about 70% of the total annual catches is estimated to be taken by small-scale fishers (FAO, 1992). It is noteworthy to indicate also that that globally, small-scale (artisanal) fisheries have been

identified as one of the world's poorest groups (Grover et. Al., 1980). Approximately, 912,000 fishers work full-time in the region employing 135,000 canoes in their fishing activities. The small-scale fisheries employ large numbers of persons at the fishing, landing, processing, marketing and support level – for example, 912,000 fishers work full-time using 135,000 canoes, while overall, about 4 millions people get jobs related to the fishing industry in the region. It is needless therefore to say that fish is the most significant protein resource in fishing communities in the region. The per capita consumption of fish is estimated at 9.2 kilogram, which of course is far below the world recommended consumption, which is 13 kilogram (FAO, 1988).

The average population growth rate for the region range between 2-3% and the overall consequences of such high population growth rate is that of food security and level of poverty. However, the rising demand for fish due to the rapid growth of population as well as the improvement of fishing technologies have increased the pressure on renewable but limited fishery resources in the region. There are other factors responsible for reduced availability of fishery resources, these include: uncontrolled practices of fishing, pollution and degradation of the aquatic environment. All these of course are issues of prime importance, which bellies the great diversity between the livelihoods of the majority of artisanal fishers within and among the countries in the region. This is translated into what many of fishers have

in common – vulnerability! What the population in the region has coined as crises therefore need to become the impetus for changes in the fishing industry at the level of the coastal communities. Simply put, there is need for the coastal population to develop their own coping strategies.

In the Traditional Setting: Poverty and Vulnerability

Women education in the West African region similar to what obtained in most developing countries of the world was calculated to achieve two primary objectives: to create good wives and mothers; to enable these good women run the affairs at home. Thus, the major role of women was a functional one and the emphasis was on social responsibility, participation in family job orientation, spiritual and moral values. In the traditional setting, the women participated fully in the lifestyle dictated by the society, her role being delineated by custom.

In West Africa just like most similar regions globally, the bedrock of the coastal and riverine population is constituted of communities that have been in existence for several generations. Fishing as a skill is handed down from generation to generation - father to son and from mother to daughter and so on. There is therefore no gainsaying that in the West African region, fishing plays a pivotal role both in the national as well as in the regional development policies. The region is beginning to come to terms with the fact that many of its resources are either beyond or at the level where the maximum yields can be sustained in the long term. Also, the environmental degradation of the coastal and riverine areas by the industry and urban development projects is an issue that is recognized. Thus, if the vulnerability of the fishers and their families is to decrease in such a measure as to improve the livelihoods of the poorer members of the population, then the situation must change in order to allow for the improvement of the livelihoods of these inhabitants.

The fishers involve their family members in the fishing industry. The women and children are usually the most vulnerable in the society and so they are the most susceptible of the people to poverty. The predominance of women in the small-scale fisheries post-harvest activities: micro-fish retailing, fish processing, fish distribution and marketing, make these women the major players in the socio-economic development of the West African countries. Since the women represent a majority in fisheries sector, they are more often responsible for the fixing of locally the gains made from the fish trade for items such as: housing, health, education, and even supplying fishing gears.

The important aspect of the vulnerability of the women and children is closely related to the external environment, which is responsible for shaping their future with movement towards poverty (Sahn, 1990). Many publications have documented that these people (smallscale fishers and their families) have no secure access to good or better management of the natural resources; lack access to basic and/or facilitating infrastructure such as: electricity, pipe borne water, education, technologies, training, health and nutrition to list a few of features which risk their movement toward poverty. More importantly these women lack a more secure access to financial resources as well as a policy that supports multiple livelihood strategies that promotes equitable access to competitive markets (Grover et. Al., 1980; FAO, 1988; Aguilar-Manjarrez and Nath, 1998; Aloba, 1998; Williams and Nandeesha, 1999).

Division of Labour

Since 80-90% of the African women live in rural areas. rural women supply about 80% of the labour force, it follows that most of them are still subject to or influenced by the traditional forces. Also in the traditional African society, the division of labour on the basis of sex varies from ethnic group to ethnic group and from the local community. In general, women usually fulfill multiple roles in their lives and careers, therefore, making time allocation a critical issue to focus on when developing programmes males however are responsible for the production of natural resources like cash crops and fishing in the sea or oceans, a status in the division of labour, which have been influenced by the hunting tradition. It is also noted that men and women's sense of confidence and self-realization were intrinsically linked and embedded in the social systems.

These sex roles in terms of division of labour are instilled in the children by the parents from generation to generation. Thus, the relationship of the economies of sub-Saharan African countries, especially those in West Africa and the dynamic changes in fisheries sub-sector of agriculture over the past 3-4 decades (since political independence of the West African countries) have not reduced poverty nor have it improved the women's situation. Instead, the women's situation has worsened (Staudt, 1982; Palmer, 1988).

A closer evaluation of why the situation has worsened reveals the assumption that the problems confronting women and the society in general be it in agricultural setting or not, would be resolved by the resurgence of open-market activity and growth is yet to be borne out. Albeit, underlying this assumption is the lack of recognition for the women's economic role in the promotion of their income generating activities. Within

the household, women have distinct right and obligations to the family and the household. They also have distinct functions as it relates to the market activities. The factor is so very glaring in the fishing industry where the women's situation is determined by their multiple responsibilities for the care and welfare of their families, the household tasks, the community and the formal and the informal income-generating activities.

<u>In the Modern Sector: Economic potentials of Women in Small-scale Fisheries:</u>

(A) Limited Access to Resources

Like their counterparts in Asian countries, knowledge of the participation of women in fisheries sector in the African countries is slowly evolving. Also as concluded by participants at the first International Symposium on Women in Asia Fisheries (November 1999) the way to rectify the situation would be for governments in Africa and Asia to cover gender questions on fisheries and aquaculture in the regular agricultural censuses (Williams and Nandeesha, 1999). Findings of an unpublished study carried out in several of the fishing communities in the West African region between 1992 and 1998 showed that women are marginalized in planning and policymaking and are disproportionately represented among small and resource-poor fishers (Williams and Nauen 1999). They find it difficult to respond to market incentives and other policy reforms in the expected manner because the constraints these women face daily are definitely more severe than those facing the men who are provided with the fishing gears and equipment to go fishing. Only the few established fish mammies have direct access to financial resources (cash), fishing boats and gears. Majority of these women lack the basic education, credit, extension services, technology and information which are critical for the shifting patterns of increasing output within their limited resources. The impact of the structural adjustment programme (sap) years is still very apparent. The ways in which each of the constraints impacted on women in small-scale fisheries from profiting from the reforms associated with sap as listed in the write up.

(B) Support Systems and Delivery Agencies

Studies in Africa have showed that male heads of household and rich farmers are the clients of agricultural extension services (Bond, 1974; Cowle, 1979; Bettles, 1980; Bay, 1982; Spore, 1993). The same is true in the fisheries sector for example, the experience and knowledge of the participation of women in the fisheries sector in the West African Development of Artisanal Fisheries (WADAF) has confirmed that small-scale fisheries is marginalized in relation to industrial fisheries

as a result of strong competition from the industrial fisheries; Lacked adequate financial resources and infrastructure; lacked communication and the illiteracy among the stakeholders are high (Satia, 1995). A survey in Ogun State, Nigeria (Elabor-Idemudia, 1991) and Osun State, Nigeria (Ogbimi and Williams, 1999) revealed that Extension Agents visited between 7-10% of women farmers every week compared to 70% of the male farmers who received weekly visits.

A number of factors are responsible for women's low participation in extension programmes. In the agriculture sector extension information services focused on particular cash crops with the exclusion of food crops and fisheries, which would have been of tremendous interest to women. Additionally, the methods employed in the dissemination of technical information tend to concentrate information to the better-endowed farmers and the exclusion of poorer farmers and women (Berger et. al., 1984, Satia, 1995).

It should be crystal clear that women's ability to participate in extension programmes is limited in the region as a whole because of their lack of education, time constraints because of their dual household and economic activities, as well as the structure of extension programmes, which tend to use mostly male agents and people with no fishery background. Lastly, training session is often schedule to be given at times when the women cannot attend.

An FAO (1989) study found government investment on agriculture represented less than half the sector's contribution to national income, therefore, it is reasonable to guess that women's access to extension services and training especially in the area of fish processing, packaging, distribution and marketing are unlikely to improve when the overall funding and availability of services is declining.

Thus, support systems if it is to enhance the economic potentials in small-scale fisheries need to be organized in such a way that it will help to bring about social changes in all the fishing communities be it in Africa or in Asia or other remote areas of the world where women's activities in the fishing industry are still being discriminated.

(C) Access to Education

Women education faced various handicaps dating back to the inception of modern formal education in all developing countries including the West African region. Girls were discriminated against in favour of boys due mainly to the prevailing social set up. Lack of education among men and women in rural communities, especially those in fishing communities in West Africa posed significant constraints on sustainability in West African artisanal fisheries just as it will do on farm production in general. This is because many studies have showed that improvements in agriculture in general are linked to education (Bond, 1974; Bettles, 1980; Bay, 1982; Berger, 1984). Educated farmers tend to be more likely to adopt modern agricultural practices (Binswanger, 1989). For example, in 1985, approximately 50% of adult women in developing countries were literate; although the average is much lower still in the African region where only 36% of the women were reported to be literate (Sivard, 1985). There are significant gaps between girls' and boy's education even at the primary level where the greatest gains has been made. For example, in 1990, about 20% of girls were enrolled in primary school in Niger compared with 38% boys; in Senegal, 49% girls were enrolled in primary school compared with 71% boys (World Bank, 1990). The data from Sivard (1985) and the World Bank (1990) help to underscore the information that progress in literacy and education between female and male has been very slow, thereby, slowing down the economic potentials of women in rural areas in particular women in smallscale fisheries.

(D) Need to ensure food security

The priority abrogated to ensuring household food security is yet another factor limiting women's potentials because it keeps a proportion of resources 'locked' into food and prevents the women from shifting their capabilities into nonfoods. Von Braun (1989) documented evidence from crop diversification projects in the Gambia, Kenya and Rwanda where smallholder make conscious effort to maintain household food production alongside newly introduced crops. This strategy by women in crop production is similar to what the women in small-scale fisheries do. In times of economic crisis as was the case in most of the African countries dating back to 1985 till the turn of the century, women dependent on small-scale fisheries for their families survival have reacted to their situations economically by intensifying household food security strategies. For example, for the last decade and a half when many African nations struggled through economic mis-management, civil conflicts and so on, the food situation have remained basically healthy simply because the small-scale farmers and fishers continued to find a way to produce their own food (Satia, 1995).

The potentials to ensure household food security is a trademark of small-scale farmers in general, be it in crop production or in small-scale fish production, it this characteristic is more common with the women because they are obligated with responsibility of ensuring a constant supply of household food needs, more so in Africa and Asia. Let us face the reality of this potentials in women, even where they are explicitly responsible for

providing food, in many regions of the world where there are poor women, they are found to assume the role of providing food for the household, especially in places where the household come under economic stress.

Declining levels of employment as is currently the case in many of the fishing communities in Africa contribute to growing food insecurity. This is due to increases in prices of imported goods (fishing nets, gears etc.) and the prices are higher as a result of subsidy removal and/or devaluation of local currency as is the case in many of the African countries. Another aspect of importance currently in many African countries that has an impact on the role of fisheries sector as a source of employment is the increasing number of youths entering the labour market annually. On a positive note it must be desirable to absorb these youths into the primary and secondary fishery sector, but, an increase in the number of fishing vessels could lead to a decrease in catch per unit of effort. In economic terms, this would lead to a decline in productivity resulting in a failure in improved livelihoods of the fishing families as is the situation presently in fishing communities in West Africa. This is a major challenge facing the region - fisheries planning and management in order to control the fishing effort of the stakeholders. Researchers currently involved in fieldwork in many of these African fishing communities that there have been too much talk and not enough actions. This is because there are a number of NGOs working with the regional programme in West Africa (WADAF), which is still trying to raise funds to implement its programmes.

Finally, there is a need to define some priority actions to promote the role of women in the economy because it has been showed that women are productive and efficient when the have access to the right technologies and opportunities. However, new technologies and modernization in the fisheries sector tend to marginalize the backyard activities with which the women are associated. There is no doubt however, that small-scale aquaculture, rearing of fingerlings, low capital fish processing and value-added fish products are some practical examples of fisheries activities which will be well suited for

(E) <u>Post-harvest Fisheries Losses and Insect</u> Infestation of Traditionally cured fish

Insect infestation of traditionally cured fish is an important cause of post-harvest fish losses in West Africa. This is because from the time the fish enters the net or the trap to the time it is taken to the market to be sold as fresh fish or throughout processing, storage, distributing and so on it is susceptible to attack by insects. The losses to the stakeholders range from physical loss whereby it is either thrown away or consumed; quality loss is the difference

between its potential value or actual value (either case, there is an economic residual value); market force loss (changes in demand and supply, not of quality, but of price of fish can change); nutritional loss (biochemical changes within fish flesh, for example resulting from spoilage or processing). In any case, the monetary value of physical and quality loss combine to give total financial loss and this is significant importance to the stakeholders in the fishing trade – the women.

The predominant stakeholders in artisanal fisheries postharvest activities such as micro-fish retailing, fish processing, distribution, marketing and transportation are the women in the region. These activities alone make them the major actors in the socio-economic development in West Africa. Therefore, innovative and valueenhancing technologies aimed to obtain good quality fish products within West Africa should target women and men. Such technical level should not discriminate against the women because of their limited educational level. Also, these technologies should be encouraged at the professional organizational level where members can reproduce the actions. The activities should be supported with posters, radio programmes and so on that will strengthen the communication capacity stakeholders.

(F) Aquaculture

Fish farming when it was introduced in West Africa was considered a 'cash crop' like other cash crop in agriculture and as an enterprise was within the domain of the male in the fishing community. Grover et. al. (1980) reported that this might have been one reason why it has not become well established. By disregarding the potentials of women in the planning and implementation stages of fish farming may have been responsible for the slow take off and this would be a better reason than the above.

One solution would be to attempt to alleviate the various constraints facing women by implementing complementary policies that will reallocate available productive resources and new technologies to both men and women alike. Since women's labour is an underutilized resource, the changes in policies could yield higher marginal returns as well as greater output in fisheries from the standpoint of current aquaculture development process without additional investment, thereby mitigating the short-run output dampening effects experienced in the aquaculture sector so far.

Conclusion

It is not possible to detail every potential of the women in small-scale fisheries in West Africa, rather, an appropriate way to ensure the full participation of women in fisheries development is to advocate for economic action for rural rejuvenation along the saying of Miserere: "Rural development is participation of people in a mutual learning experience involving themselves, their local resources, external change agents, and outside resources; People cannot be developed, they can develop themselves by participation in decisions and co-operative activities, which affect their well-being."

It is a reiteration of the fact that women in the fisheries sector are still marginalized in planning and policymaking. Unless this development process is changed, women will continue to suffer inequality and discrimination. There is no doubt that women make a significant but undervalued contribution to fisheries, agriculture in general, processing, retailing and other sector services. At every opportunity where the knowledge of the participation of women in the fisheries sector is shared, one is sure that the economic potentials of women in fisheries sector is evolving slowly and still lags behind that of other rural sectors in Africa.

Concluding therefore, one way to rectify the situation would be for African governments to continue to make greater efforts to cover gender issues on fisheries and aquaculture in their regular agricultural censuses. Additionally, the needed investments in all these development programmes can occur only if current conditions of persistent recession and huge debt burdens in African countries, particularly in West Africa where there is greater need for countries to cooperate to resolve such issues as the debt crisis and the outflow of capital from the nations.

Recommendations

- Men and women must join hands to destroy rigid societal sex-role stereotypes, thereby, freeing women from societal prejudices and stereotypes in order to make their societies more efficiently run and the region a better place;
- 2. The government and development/change agencies must not only be prepared to recognize the economic role of the women but must also extend to them the same recognition and facilities as the men are enjoying;
- 3. Governments must make conscious efforts in their public pronouncements and their

- policies to integrate the women in whatever they do
- 4. A concerted effort must be made to address the specific problems peculiar to women in fishing communities as they are currently doing in the urban sectors, which impact on the women's economic potentials and performance. These will range from public health measures to credit facilities, to appropriate technology, to appointing female extension agents.

References

- Aguilar-Manjarrez, J and S. S. Nath (1998). "A strategic reassessment of fish farming potential in Africa." CIFA Technical Paper, FAO, Rome, Italy, (32): 170 p.
- Aloba, O. (1998). "The Role of Nigerian Women Yesterday, Today and Tomorrow." In *Women In The Rural Environment*, Friedrich Ebert Foundation, Lagos. Proceeding of the Conference on "Women In the Rural Environment." 23-26 June 1997, 11-18 p.
- Bay, Edna, ed. (1982). Women and Work in Africa, Boulder Co: Westview Press.
- Berger, M., V. DeLancey and A. Mellencamp (1984). Bridging the Gender Gap in Agricultural Extension. Report Prepared for the office of Women in Development/USAID, Washington DC: International Center for Research on Women.
- Bettles, F. M. (1980). "Women's Access to Agricultural Extension Services in Botswana." Paper Prepared for Ford Foundation Workshop on "Women in Agricultural Production in Eastern and Southern Africa," Nairobi, 9-11 April 1980.
- Binswanger, H. (1989). "How Agricultural Producers Respond to Prices and Government Investments." Paper Presented at First Annual World Bank Conference on Development Economics, Washington DC, 27-28 April 1989.
- Bond, C. A. (1974). *Women's Involvement in Agriculture in Botswana*, Gaborone, Botswana: Ministry of Agriculture.
- Cowle, W. J. (1979). "Aspects of Resource Access among villagers and farmers in Kenyanja Parish, Chipata District." *Poverty and Wealth in Rural Zambia*, David Honeybone and Alan Marter (eds.). Institute for African Studies Communication No. 15, University of Zambia.
- Elabor-Idemudia, P. (1991). "Impact of Structural Adjustment Programs on Women and their Household in Bendel and Ogun States, Nigeria." Structural Adjustment and West African Women

- *Farmers*, Christina H. Gladwin (ed.), Gainesville, University of Florida, 128-150 pp.
- Food and Agriculture Organization of the United Nations (1988). "Fishery Country Profiles." FAO, Rome, Italy, Vol. 68.
- Food and Agriculture Organization of the United Nations (1989). Effects of Stabilization and Structural Adjustment Programmes on Food Security. Committee on World Food Security, Fourteenth Session, Rome, Italy, 3-7 April 1987.
- Food and Agriculture Organization of the United Nations (1992). "Sustainability in West African Artisanal Fisheries." FAO, Rome, Italy, CECAF/FD/92/2.
- Grover, J. H., D. R. Street and P. D. Starr (1980). "Review of Aquaculture Development Activities in Central And West Africa." International Center for Aquaculture, Agricultural Experiment Station, Auburn University, Alabama, USA, 31 p.
- Palmer, Ingrid (1988). Gender Issues in Structural Adjustment of Sub-Saharan African Agriculture and Some Demographic Implications. Geneva: International Labour Office, World Employment Programme Research Work Paper 2-21/WP166.
- Ogbimi, G. E. and S. B. Williams (1999). "Gender Sensitivity and Marginalized Group: Assessment of Availability of Productive Assets to Women in Agricultural Development." Unpublished Paper. 14 p.
- Sahn, David E. (1990). "Poverty, Food Security and Policy Reform in Africa." *Macroeconomic Policy Reforms, Poverty, and Nutrition: Analytical Methologies*, Per Pinstrup-Anderson (ed.), New York: Cornell Food and Nutrition Policy Program.
- Satia, B. (1995). "The Programme for Integrated Development of Artisanal Fisheries in West Africa." NAGA, The ICLARM Quarterly, January 1995, 9-11 p.
- Staudt, Kathleen A. (1982). "Women Farmers and Inequalities in Agricultural Services." In *Women and Work in Africa*, Edna Bay (ed.), Boulder Co: Westview Press.
- Sivard, R. (1985). *Women: A World Survey*. Washington DC: World Priorities.
- Williams, M. J and M. C. Nandeesha (1999). "Women do Fish." NAGA, The ICLARM Quarterly, Vol. 22, No. 2, April-June 1999, 40-41 p.
- Williams, S. B. and C. E. Nauen (1999). "Gender in Fisheries Development and Trade in West Africa." *Journal of West Africa Fisheries*, University of Ibadan, Ibadan, Nigeria (in Press).
- World Bank (1990). *Social Indicators of Development*. Baltimore MD: John Hopkins University Press.