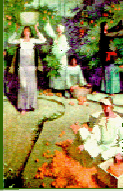




Partnership in Development Research

Research Briefs

No. 13



Enhancing the capacities of fishermen in Edco Lake, Beheira Governorate

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Problem Statement

This research is inspired by the problems reported to *Al Ard* Center for Human Rights by fishermen in various lakes of Egypt. Faulty practices and policies, such as the drying up of a large part of the lakes, and other forms of transgressions have, according to these reports, led to the depletion of large parts of the lakes, which are an important natural resource. Ultimately, such policies will undermine our ability to sustain this important source to the detriment of present and future generations.

Reports of Al Ard Center regarding problems faced by fishermen in Edco pointed out that Edco was in the past one of the richest fish lakes in the whole world, with a total production representing 41% of Egypt's gross national product and a total area - in the 1950's - of about 45000 feddans. At the present time, the lake has lost about 25,000 feddans and its area has gone down to 20,000 feddans only. Recent years have also witnessed the phenomenon of "water feudalism" which points to the control by a limited number of people, who do not exceed 254 individuals, over the larger part of the lake. Little is now left for the fishermen, the majority of whom have already given up the fishing profession. Ten years ago, the number of fishermen was 20,000. Now their number has declined to 11457 individuals responsible for 57285 persons. Considering that the average family size in Edco is five members, and the remaining water surface on which fishing is allowed is 5000 feddans, then the share of each fisherman is one tenth of a feddan i.e. 400 meters, which is very limited when compared to previous figures before the implementation of the fish breeding policies.

Recently, the lake's water surface has been subject to several environmental violations which affected its fish wealth and consequently the fishing profession. Among the new phenomena is the drying up of parts of the lake, shrinking lake area and the changes in the water characteristics in terms of its physical, chemical and biological composition.

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Those hazardous phenomena are further exacerbated by other practices that lead up to the pollution of the lake and contamination of the lake environment. In addition, other malpractices result in the proliferation of weeds, nenuphar and ditch reed. Clearly, such violations of the economic and social environment in the Edco lake constitute a threat and a challenge to the lives of the fishermen and prevent them from practicing their normal life and profession.

Study objectives:

This study attempts to identify the main problems of fishermen in Edco Lake. It seeks to engage them in the discussion on how to develop their capacities as well as the best means to manage and use available resources. The study focuses on the following:

- Reasons behind the deterioration of the living conditions in Edco and the best ways to develop the capacities of the region from a human, economic and political perspective.
- Means of managing one of Egypt's natural resources, and ways of protecting this and other resources from pollution and waste. We believe that environmental degradation leads to deterioration in the living standard of individuals and obstructs the process of social, human and economic development.
- Empowering fishermen to manage their resources, and encouraging them to take initiatives and promote a participatory approach. This is achieved through rendering assistance to fishermen by raising their awareness and training them to use the most appropriate methods identified by the study to enhance their capacities.
- Promoting collective action among fishermen by promoting new developmental methods that allow them to better use and manage their resources and ensure their sustainability. Fishermen should also be enabled to participate in designing and implementing their developmental programs.

Methodology:

The study was based on a thorough review of available literature and empirical field work. A sample was selected from two areas where fishing is the main profession: the town of Edco which hosts 66.4% of the total *Markas* population and from El Me'adiya village with 14.8% of the population (Al Beheira Population Census – 1996). The sample comprises 100 individuals, classified into ten homogenous groups. Meetings were held with the ten groups, in addition to ten case studies selected from each group. Meetings were held with individuals and groups.

Males constituted 90% of the sample and females 10%, reflecting the limited number of women in the fishing profession. Children less than 15 years constituted 10% of the fishermen and individuals less than 20 years constituted 5%. The age of the rest of the sample ranged between 20 and 41.

Those constituted 44% of the sample.

Findings:

The study undertaken by *Al Ard* Center indicated a very strong relationship between the development of natural resources – Edco lake in the present case – and human resources represented by fishermen. It showed that any dis-equilibrium in this formula leads to more waste of environmental resources on one hand, and impoverishment of human capacities on the other. A review of developments in the Edco Lake clearly supports the above conclusion.

Violations committed in the lake's water surface are accompanied by other violations in the lives of fishermen. No doubt, the policy of water feudalism which meant trespassing over the water surface through fish breeding and the consequent steeling of the offspring - the main source of fish wealth - affects the livelihood of fishermen. Ultimately these sources dry up and fishermen are impoverished, pushed into unemployment and their social conditions deteriorate. The phenomenon of 'water feudalism', as indicated in the introduction to this study, points to the concentration of the lake resources in the hands of a limited number of beneficiaries (254 individuals from among 11457 fishermen). In the final analysis, this implies that the majority of fishermen are deprived of the right to use their resources and suffer different forms of impoverishment as follows:

1. Decrease in income:

Income reduction stands on top of the negative consequences of the adverse situation of fishermen, which often pushes them to either migrate or give up totally the fishing profession. According to fishermen, income decrease is in fact the main reason behind migration or abandoning the profession. It is important to point out, however, that except for a total of 5%, none of the sample respondents are owners of fish farms. This is important to consider as we review income rates and other factors.

Decline in income is a general phenomenon and constitutes a problem for 89% of the sample. Any reported income increase, is only illusory since such increase is usually used up to cover transportation and accommodation in other places when fishermen are forced to migrate to the sea or to other lakes in search for better job opportunities. In addition, the noticeable increase in prices since the eighties (which coincides with the expansion in fish farms) means that any increase in income is in fact a decrease. Fishermen offer anecdotal evidence of the deterioration in their standards of living. They say that before the expansion in fish farms (yardstick of income change), fishermen tended to marry off their daughters to other fishermen. This does not take place any more unless there are strong family bonds or kinship ties. They now prefer white collars, merchants and professionals.

The fact that 10% of the sample are children less than 15 years, and 5% less than 20 means that most of these young people do not go to school. Parents, particularly boat owners, replace wage employees by their own children, since they can have them work for longer hours and do not have to pay them. The study indicates that only 2% of the children in the study sample work for pay. They are all young people whose fathers had died and did not leave a fishing boat behind.

2. Migration to other lakes and poor working conditions:

With the decrease in income, many fishermen in Edco who did not give up fishing, were forced to migrate to other lakes. Some left to work in the sea and suffered a variety of other problems that are not within the scope of this study. Others headed for al Borolous, Maryout, Al Bardaweel and Nasser lakes in search for new sources of livelihood. Those who left Edco due to the very harsh work conditions constituted 27% of the sample.

3. Abandoning fishing:

Eight percent of the sample pointed out that the absence of alternative work opportunities in Edco was behind their decision to give up fishing and search for other work opportunities. They are now engaged in the sale of fish and frogs or in simple trade activities (grocery, butchery etc..). Others, particularly older and retired fishermen whose sons still work on their boats, have set up their own small private enterprise on the side such as coffee- shops and carpentry workshops, and are content with the income they generate. In all cases, those do not constitute a large percentage.

4. Water feudalism:

“Water feudalism” is associated with the increase in amount of silt in the lake. This takes place when the level of water declines due to factors of water sedimentation produced by sewage water, industrial waste, or the dumping of waste in the fish farms. Generally, the level of water in the lake does not exceed one square meter. However, in some spots, water level declines, rendering it more difficult to fish there and making the water surface more vulnerable to dry up and waste the fish wealth. When such developments take place, fish breeding becomes an attractive choice.

“Water feudalism” also implies violating the right of fishermen to work in the lake, as indicated by the study. This deprivation is intensified with the proliferation of fish breeding, which ultimately implies a waste of the human resources represented by the fishermen’s expertise and skills, inherited and developed over the years. Forbidding fishermen’s access to the lake does not only augment the environmental problem, but is also a waste of this rich human resource. Facing this unfair situation,

fishermen tend to resort to generally unacceptable ways of fishing in the lake. Twenty eight percent of the sample revealed that they use fishing methods that are detrimental to the fish wealth in the lake.

5. Child labor:

“Water feudalism” resulted in a high rate of child labor in the Edco lake. Most of the children in the sample – except for 2% - work without any financial returns. Some don’t go to school and others drop out, a situation that ultimately results in high rates of illiteracy. Fishing boats usually accommodate three fishermen and because of the limited income and poor opportunities in the lake, fishermen seek the help of their children instead of hiring others to help them in return for wage.

6. Absence of cooperatives:

Among the problems of fishermen in lake Edco, is that they are not allowed to participate in running their life and managing their environmental resources. Using repressive measures, fishermen are denied access to the management of their cooperatives and are forbidden from practicing this right. Thus, applicable policies do not necessarily reflect reality or the needs of fishermen.

In turn, the absence of participation leads to other problems and alienates fishermen from their cooperatives. Most of the sample said that lack of participation is one of the main reasons behind their accumulating hardships. However, the recent elections of the Edco fishermen association prove that lack of participation does not reflect the absence of motivation on the part of fishermen. About 30% of the fishermen do not subscribe to any cooperatives. This raises larger questions about the significance and effectiveness of fishermen’s cooperatives in shaping trends among fishermen, helping them develop their resources and encouraging their participation in the selection of the most appropriate methods that can be used to develop these resources. The absence of cooperatives has created a strong desire among fishermen to set up independent unions and associations away from administrative restrictions.

7. Fishermen’s developmental needs:

Following are the most critical developmental needs which – according to the sample– must be addressed:

- 100% setting up a union for fishermen to manage the lake
- 95,5% providing fishermen with credit facilities
- 93% severing the lake’s affiliation to the department of fish wealth
- 73% health insurance
- 24% amending the fish farms law

In addition, 31% of the sample demanded that the retirement age be reduced to 50 and retirement pension, currently at EP 79 - increased. About 24% of the sample voiced their strong demand to amend the fishing law since it has become obsolete and no longer responds to the needs and realities of fishermen. In addition, the law is oblivious to fishermen's rights as stipulated by the constitution and other international human rights conventions. They also urged that fishing equipment should not be sequestered and the lake's water surface protected against violations that are detrimental to the sustainability of the resources.

The above statements point to the strong desire among fishermen to take over the lake and manage it by themselves, since they are the most capable. In view of the severe deterioration of the lake condition, they vehemently oppose continuing state control over it, including the control exercised by their own cooperatives.

The study also points out that providing fishermen with credit facilities allows them to procure their fishing tools and other necessities, again a proof of their low income and poor standard of living. In addition, given the poor conditions in government hospitals and the unaffordable expenses in private clinics, fishermen need health insurance coverage in order to resist illnesses related to high levels of humidity and bilharzias that particularly spreads among children who fish in the polluted lakes.

Recommendations:

For a long time fishermen had been the sole source of fish both for exportation and for the local market. Thus, they merit special consideration and attention. Efforts must be exerted to improve their living conditions and uphold their social and economic rights. Taking the above into consideration, the study enables us to draw the following recommendations:

1. Protect the lake from pollution by taking the necessary legal measures to stop the flow of sewage water into it. Companies and factories must be encouraged to find other sewage and waste dumping channels.

2. Protect fishermen from the repressive measures undertaken by the water surface police and against violations committed by owners of fish farms and influential individuals.

Fishermen should not be arrested without the permission of the prosecutor's office.

3. Reconsider penalties stipulated by Law. No. 142 of 1983. Penalties against smugglers of small fish should be rendered more strict, while other penalties such as those imposed on fishermen when they forget to carry the fishing license, should be loosened

4. Design and organize courses to train personnel on how to protect water surfaces, regulate the fishing profession and consequently protect the fish wealth against harmful violations. This should be accomplished in coordination with officials responsible for the protection of water surfaces, scientists, senior fishermen, associations and NGOs.
5. Preserve a free water surface and prevent the establishment of fish farms within this specified area in order to protect the fishing profession.
6. Abolish fish farms that break the rules as well as those that illegally take up larger spaces than what has been approved and specified.
7. Raise the lake's water level in order to increase fish production.
8. Exempt fish production equipment and necessities from custom duties in order to raise the fishermen's standard of living.
9. Coordinate the activities of NGOs to raise the standard of living of fishermen through the design of developmental strategies, and encourage the participation of fishermen in making their own decisions. In addition, fishermen should be included in health insurance schemes, their pension raised to a minimum of EP 150 and retirement age reduced to 50.
10. Given the serious shortcomings in the law no. 124 of 1983, *Al Ard* center should seek to issue a new law to regulate the fishing profession
11. Take all the necessary measures to clean and protect the fish environment in Edco lake and put an end to activities that lead to its pollution.

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About the Program

The Egyptian Partnership in Development Research Program aims to inform development policies and strategies by linking those who conduct research with those who can utilize its findings to promote development in local communities. It promotes a research agenda which is responsive to the needs and priorities of local communities. The program is characterized by a multi-disciplinary, demand-driven, and participatory approach. The program began in Egypt in 1999. The program is directed by an Advisory Board of prominent members who are concerned with development issues.

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