

FARMER PARTICIPATION IN SOIL CONSERVATION WORKS - (EASTERN ANATOLIA WATERSHED REHABILITATION PROJECT)

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1. INTRODUCTION

The main theme of the third workshop of the MEDCOASTLAND project is **“Promoting participatory management of the land system to enhance soil conservation”** and topics of the workshop are, as stated in the project's documents;

- Legislative aspects of participatory approach including gender issues;
- Economic, social and institutional aspects of participatory approach and their impact in the sustainable use and management of natural resources;
- Analyses of bottom-up and top-down approach;
- The relation between effective land management and farmer's participation;
- Centralization and decentralization;
- The role and tasks of rural communities, scientists, researchers, policy and decision makers to enhance soil conservation and improve environmental quality;
- Participatory Irrigation Management (PIM) and Participatory Land Management (PLM) interactions;
- Rural and urban participation;
- Public and private partnerships in natural resources management;
- Participatory Land Management recommended approach.

Above mentioned objectives are completely matching the objectives of the **“Eastern Anatolia Watershed Rehabilitation Project”** which was carried out between 1993 and 2001 in Turkey. Key point of this project was the participation of local people during the preparation and implementation phase.

The World Bank experts and government officials are involved preparation phase and three main government agencies are involved implementation phase. Although it was an intention there was no any indication that NGO involvement is sufficient. Project also has been chosen most successful project of its type.

Recently an evaluation report has been issued by World Bank and this report includes the views of all parties. The views explain very well that what was expected from project and what was achieved at the end.

Background of the project were stated in the Evaluation Report is as follows;

The government of Turkey has been attaching increasing priority to sustainable environmental management and natural resource conservation. Soil erosion is one of the most serious problems affecting the sustainability of agriculture. Approximately 16 million hectares are affected, over 70% of the cultivated or grazed land area. It is a particularly severe problem in the three provinces initially selected under the project which are in the upper watershed of the Euphrates River – Elazig, Malatya and Adiyaman.

Over one-third of the land in Turkey has slopes of more than 20 percent. Turkey has 21 million hectares of cultivated land about 3.6 million hectares of which are irrigated. The country is largely self-sufficient in

food and has substantial agricultural exports. Agricultural GDP growth rate averaged 1.4% over the period 1982 to 1992, then 1.1% over the period 1992 to 2002, but with wide fluctuations recently with 2001 at -6% and 2002 at 7.6%. About four million households are engaged in agriculture. Agriculture is 13% of GDP. Crops contribute about a half of agriculture GDP, animal products about a third and forestry and fisheries the remainder.

The main agricultural sector objectives of the Government of Turkey are to:

- a) modernize production techniques, to raise productivity, yields, and farmers incomes and to reduce dependence on the weather;
- b) maintain the food requirements of the population; and
- c) promote agricultural exports.

The Eastern Anatolia Watershed Rehabilitation Project was a natural resource management project in selected micro-catchments of the upper watersheds of the Euphrates River. Treatment in the initial three provinces of Elazig, Malatya and Adiyaman was planned to reach about 250000 hectares on a total three province area of 2.9 million hectares – a coverage of about 9% of total provincial land area. In the event the total actual area achieved was about 160000 hectares, but in 11 provinces, much reducing the percentage coverage but the intention was to spread the pilot participatory process experience more widely.

The areas selected, being in critical sub-watersheds, had a disproportionate contribution to erosion. The shift rural human population has been falling in Elazig and Malatya but still rising somewhat in Adiyaman.

It was the first project of its type in Turkey to be built around a community participation approach to enable a negotiated balancing of longer-term watershed management treatments such as closure and afforestation of degraded hillsides with shorter term income generating investment such as improved forage crops, irrigation and horticulture.

The objectives of the project were stated as: to *“help to restore sustainable range, forest and farming activities in the upper watersheds of the three project provinces, reducing soil degradation, erosion and sedimentation in reservoirs as well as increasing productivity and incomes in this impoverished region of Turkey”*

This objectives were to be pursued by efforts to improve productivity of range and forestland, promote production of fuelwood, fodder and more sustainable use of marginal lands, facilitate the adoption of treatments for range and forestland to yield quick benefits, and to ensure increased involvement of local communities.

A key underlying objective was environmental rehabilitation of degraded land. There was also a component for genetic resources conservation of indigenous species.

It has been thought that carefully reading the different views of different partners of the project will help very much to increase the benefits of this kind of investment and at the same time to the public servants, local people, scientists and researchers when they intend to formulate similar projects.

Views given here has been taken from the evaluation report, involved agencies and staff involved implementation of the project, and intentionally no remarks has been made by the writers.

2. VIEWS FROM DIFFERENT PARTIES

2.1. WHAT IBRD SAY

2.1.1. Participation Processes

The heart of the project was the community participation processes. While this process took some time to become fully established, essentially the approach involved;

- a) initial visits by technical specialists to communities in the potential selected micro-catchments (there are a number of communities in each micro-catchment)
- b) meetings with the *muhtar* (the elected village leader – a form of village mayor)
- c) one or more open village meetings with the community
- d) a so-called *Farmer-Centered, Problem-Census, Problem Solving Exercise* in which, with the help

of facilitators, technical staff and the *muhtar*, each family writes down lists of problems, consolidates these in small groups, then the small groups offer findings to a plenary to develop a final village list

e) this list is then prioritized and technical staff offer ideas about how the project could help. Options for closing grazed areas are discussed at this point. The community, at any point, is given the option to reject project assistance

f) individual households are then selected as potential beneficiaries and eventually have to sign a Memorandum of Understanding.

2.1.2. Findings

The project largely delivered what it intended with respect to inputs in the selected micro-catchments on forest land and arable land – but there was failure on rangeland. In other words, trees were planted, terraces were constructed and agriculture was improved, especially forage, but there was limited change in range areas. Whether the inputs put in place will translate into the intended longer-term impacts such as reduced flooding and sedimentation in dams it is too early to say.

There were weaknesses in directing benefits towards woman and the poorer households. With respect to processes, important experience was gained by the public sector with the community based participation. But this was not really a full Community Driven Development project as understood today. Communities were consulted but had limited control over decisions and none over the management of financial resources. Whether these processes can be sustained and taken further is uncertain. There was very good coordination between ministries and departments. The lessons have been quite well accommodated in the follow-on project design. However, it now appears uncertain, perhaps even unlikely, that this project will proceed due to lack of commitment in some government ministries. Whether this reflects insufficient commitment on the community approach itself or whether it is simply a temporary budget expediency is still unclear.

Findings of particular importance include following;

- The project achieved a nationally important learning experience through a series of first steps with rural community participatory approaches although it was not a full Community Driven Development approach.
- Inter-agency coordination was exceptionally strong and has provided a very useful national rural coordination experience.
- There were impressive technical achievements in afforestation of degraded hillsides with shorter-term impacts on local flooding and possibly local soil loss and much longer-term impacts on basin sedimentation. But, unless expanded greatly, the latter will be modest in scale because it is such a small percentage of the total basin.
- A total actual project cost per household of about 2000 USD per household is high relative to many comparable projects. At this cost, and with treatment costs reaching as high as 750 USD per hectare, there are questions about the extent to which it can be scaled up. To get coverage there is a need to vigorously explore lower cost treatments, perhaps simply closure.
- The Impact Study claims a more than doubling of incomes over three years but the methodology is problematic and, in fact, real incomes have fallen. However, it is difficult to separate projects impacts from recent economy-wide changes.
- Nearly half the project costs were for plantations on government land. There are some questions about the extent to which different types of household were really interested in this or simply went along with it to get the shorter-term agriculture benefits. Pressures to open grazing can be expected to continue.
- Four effective project years is rarely enough to reach sustainability of community processes, particularly since in this case those processes had only reached an early stage of processes development. While the project lasted seven years, community processes were only fully functioning for four years. With the project now closed, it is doubtful whether sustainable processes have really been built to last. There is little evidence of similar decision making in other community endeavors, except in one or two cases of project-created Water Users Associations. Possibly the recently proposed government decentralization will help in due course.

2.1.3. Lessons

There are five main generic lessons and some other specific lessons for Turkey;

2.1.3.1. Generic Lessons

- As has been found in other cases, preexisting administrative or community processes, with risks of elite capture, need to be challenged to accommodate the needs of women and the poorer households. This will be so even if the main elements of the traditional structure are found to be essentially workable. It is especially so in cases such as this where elected officials may face conflicting incentives as both people's representatives and answerable to a government department.
- This project, and wider experiences, suggest that generally it takes more than the span of one project to develop and sustain new processes and skills to support community-driven development. But experience suggests that with longer support agreed criteria for phased exit at community level need to be developed early in the process.
- Policies related to community forest management rights and responsibilities need careful analysis and possibly enabling legislative action in advance of a natural resources management project. In this case there was insufficient attention to incentives for community forest management.
- In a project with substantial environmental objectives, and often complex efficacy and efficiency treatment trade-offs, it is important to measure at least local environmental impacts. This data may later be modeled into broader environmental impacts as treatment coverage spreads.
- In watershed treatments there are depth vs coverage trade-offs between high cost/high impact/lower coverage treatments and low-cost/low impact/higher coverage treatments. These need careful exploration at appraisal alongside “without project” scenarios to approach optimal overall impact.

2.1.3.2. Lessons For Turkey and Future Directions

- Continued focus on policy, particularly related to the Constitutional constraints to increased community role in forest management and the incentives for marginal areas cultivation provided by the flat-rate direct subsidy.
- Greater attention to challenging traditional community decision processes, in particular to demonstrate additional processes of women consultation and poverty targeting including ensuring the inclusion of semi-nomadic livestock herders.
- A program to rapidly generate technical data for assessment of least cost impact in different soils and slopes.
- Greater attention to off-farm income support. Out-migration will be the future for many households, projects may be able to assist this process.
- The setting up-front of community process-related targets with trigger points for phased graduation from intensive support.

2.2. WHAT IMPLEMENTING AGENCIES SAY

2.2.1. Ministry of Forestry

The Project Performance Evaluation Report prepared by the World Bank related to Eastern Anatolia Watershed Rehabilitation Project has been examined and Ministry of Environment and Forest's views have been showed below;

- It is said in this report that; there have been some doubts on developing the natural vegetations sufficiently, even if, there would have been some risks on sustainability because of closing down the area against grazing after soil protection afforestation and it has been claimed that the project did not produce enough data on the basis of sustainability.
- This is the fact that, in Turkey, most of the land degradation e.g. deforestation have been resulted

from over and uncontrolled grazing. So, we are not agreeing with this opinion. Additionally, this subject had been examined with the World Bank expert in the office and the field. It has been cleared that closing the area against grazing has a positive effect on regeneration of existing and degraded forest and the area could improve by itself.

- Besides this, with afforestation activities on bared land, new forests have been established by seeding and planting methods. Finally; there has been improved on water, soil and vegetation sources in watershed and decreasing the erosion. With these precautions the flood and torrent have been prevented.

At the end of the evaluation report, it has been said that;

- The project has highly plentiful effects on capacity building,
- The performances of the World Bank and the other organizations have been evaluated satisfactory,
- There is some uncertainty of sustainability of project,
- As a result, there are no deviations to be indicated according to beginning and implementing of the project,
- In 1999, the project has gained “The World Bank Perfection Reward”

With this regard, The Ministry of Environment and Forestry has the same opinion as the report.

As a result, from the point of Ministry of Environment and Forest, the Report is regarded suitable and there are no more objections on it.

2.2.2. General Directorate of Rural Services

Eastern Anatolia Watershed Rehabilitation Project has been implemented as an erosion control and watershed rehabilitation project.

The project, which has been coordinated by General Directorate of Afforestation and Erosion Control (AGM) was jointly implemented by AGM, Ministry of Agriculture and Rural Affairs, General Directorate of Rural Services and General Directorate of Forest and Village Relations.

Although some problems have aroused during the implementation phase, the project was successfully implemented in general. Firstly, the coordination between government institutions was sufficient. Secondly, the coordination between government institutions and local people was well organized during the project preparation, implementation and protection steps. Participation of local people in the project, in terms of support for supervising and contribution, was very high compared to the other projects implemented in Turkey before. Thirdly, technical and environmental experts rated the project very successful from technical and environmental aspects.

During the project implementation, General Directorate of Rural Services faced some problems because of the insufficient local budget and some of the villager's demand could not be covered by the project.

Finally, in the project areas, erosion control activities and rural development activities were completed in coordination with government institutions and local people.

2.2.3. State Planning Organization

The project, which was launched under the loan agreement concluded between the World Bank and our Government on March 25, 1993, was completed at the end of 2001. Total project cost was 110 million USD, including 77 million USD to be provided from the proceeds of a foreign loan. Project activities were planned for micro-catchments and launched in three micro-catchments in three provinces (Elazig, Malatya and Adiyaman) in 1993.

Project activities were carried out by the General Directorate for Rural Services (GDRS) and the General Directorate for Agricultural Production and Development (TUGEM) and coordinated by the General Directorate for Afforestation and Erosion Control (AGM).

The project's objectives included rehabilitation of damaged forests, pastures and farming areas; restoration of sustainable pasturage, forestry and farming activities in upper catchment areas, reduction of sedimentation, erosion and soil deterioration in reservoirs; training and awareness-raising on proper use of natural resources; increasing efficiency and income of poor population living in the catchments; and encouraging participation at planning and application phases. In line with those objectives, the project has

three components, namely rehabilitation activities, income-generating activities and catchment management support activities.

Those activities, which were initially planned to be limited to three provinces and 54 catchments, were subsequently expanded to 11 provinces and 88 catchments until the end of 2001. AGM took part in project-related works in 85 of those catchments while TUGEM and KHGM were active in 86 and 51 catchments respectively.

Until the end of 2001, AGM carried out soil conservation afforestation on 71991 hectares in the 85 micro-catchments where it took part in project-related activities. In addition, it rehabilitated 19282 hectares of pastures, 2240 hectares of oak and 1687 hectares of cedar in addition to gallery afforestation on 81 hectares.

To carry out those works, AGM spent a total of 43 million USD, including 27 million USD earmarked from the proceeds of the foreign loan during the period between the inception of the project and the end of 2001.

TUGEM's activities in connection with the project included agronomic package applications on 7886 hectares, fallow reduction on 9813 hectares, demonstrations on 1124 hectares, grafting of 1224000 pistachio trees, planting of 238049 seedlings along borders of fields, growing fodder plants on 1903 hectares of irrigated land, establishment of vineyards and gardens on 8864 hectares, as well as distribution of 34560 beehives.

To carry out those works, TUGEM spent a total of 6 million USD, including 5.2 million USD earmarked from the proceeds of the foreign loan.

KHGM constructed irrigation channels with a total length of 1069498, 1260 irrigation ponds and 2643 hectares of farming terraces under the project and thus opened 12368 hectares of land to irrigated farming.

To carry out those works, KHGM spent a total of 29 million USD, including 15.7 million USD earmarked from the proceeds of the foreign loan.

All the organizations concerned spent a total amount of 78.3 million USD, including 47.9 million USD funded by the foreign loan during the nine year project implementation period.

The physical targets remained unchanged although the number of provinces and catchments included in the project had been increased. AGM and KHGM's physical implementation ratios were 152 and 85 percent, respectively as compared with the initial targets. TUGEM's physical implementation ratio was much lower. If the physical targets are adjusted in line with the increase in number of provinces and catchments, it would be seen that realization ratios were actually lower. Therefore, the realization ratios calculated are misleading, because the targets outlined in Staff Appraisal Report relate to 54 catchments in three provinces. The projects was, however, implemented in 11 provinces and 86 micro-catchments.

The shortcoming caused by the planning phase has resulted from the failure to analyze the project adequately and insufficient involvement of the parties concerned (public agencies such as State Planning Organization and the Treasury, target groups, etc.) and their analyses. Thus, the report states that "participation" was of crucial importance to development, preparation and implementation of the project, adding that it constituted the underlying philosophy of the project. In fact, "summarized excerpt from interviews with village target groups", which is attached to the report in question, indicates that participation of target groups was not adequately efficient.

Had all the stakeholders been involved in project planning and implementation processes and adequately analyzed, AGM's lack of experience in working local people, TUGEM's lack of experience in working upper catchments and the problems stemming from KHGM's regulations could have been identified and thus necessary measures could have been taken and the project could have been designed more efficiently. The report also notes that there were some shortcomings in follow-up on and evaluation could have been defined clearly and a feasible and sustainable structure could have been established.

It is known that SPO establishes connections between development projects and plans and programs, analyses feasibility studies and prioritizes projects before allocation of funds. The next step will involve a decision on funding sources for the priority projects included in the investment program. Therefore, such problems could be avoided if the SPO and the parties concerned efficiently design the project before the financing negotiations related to projects proposed to be funded by foreign loans.

The Implementation Completion Report, drawn up by Bank, and the Project Performance Appraisal Report state that performance of the Bank, which assumed a key role in all phases (project development, preparation, analysis, follow-up implementation and post-implementation assessment) of the project, which

is said to have been developed and implemented based on a participatory approach, was satisfactory. The findings and opinions expressed in section “Lessons Learned” and “Future Orientations” of the report and “Excerpt from Interviews With Village Target Group”, which is attached as an annex, substantially overshadows the project's success. As a consequence, the project's physical and cash realization ratios remained low. As a natural outcome of that fact, the cost of the loan, which was utilized at a rate of 62%, to our country further increased due to amounts paid for undisbursed amounts (commitment fee).

Although the amount representing interest payments arising from utilization of the said loan should have been included in the project cost and economic profitability calculations should have been made accordingly, The appraisal reports make no mention of that amount.

On the other hand, high figures are given in the evaluations pertaining to economic profitability ratios, but contain no satisfactory explanation as to how those ratios were calculated.

A total of 27 missions consisting of the Bank's personnel were organized during project implementation and a total of 860000 USD was spent, which corresponds to 1.8% of the loan borrowed to fund the project and is therefore considerably high.

2.3. WHAT TARGET GROUPS SAY

These extracts were taken from selected focus group comments. There were 14 focus groups done by the consultant following a guidance format and about another 7 partially following the same format by Project Performance Appraisal Report task manager. Attendance ranged from 4 to 20.

- Women do not take part in decision making mechanisms nor are there any women leaders in the village.
- 30 officials came in 1998 to introduce the project to the village. The village government called all villagers together at the school and 70 males of 19 households participated in the first meeting. Only three or five people intentionally did not participate because they did not want the project implemented in our village. Those people were owners of large livestock herds who were using the rangeland and did not want the rangeland closed for rehabilitation. The villagers wrote down their demands and these demands were then graded according to the majority's choice. The following year some measurements taken from water, soil, etc. and the project started to be implemented.
- ... but the conditions of all villagers do not change... There have not been any changes for us.
- Our village will benefit today and also in the future from the project activities.
- ... all of the villagers received something from the project and it was of great benefit to villagers.
- The only project activity that was bothering some of the villagers was the land closure for rangeland rehabilitation... There are not any costs to the poor households, on the contrary they all benefited from the project.
- All the villagers except women participate in decision making.
- Most of the villagers were satisfied with the project.
- After the project, we lost the rangeland and we can not graze our livestock because of closure.
- People wishing to get hives, gave their names to the village governor and the ones who received hives were chosen by drawing lots.
- The project has been of greater benefit for those who have their own land.
- I believe that since we owned the project, the activities have increased in our village.
- Purchasing power of the people is weakening.
- They brought apiculture which the villagers were unfamiliar and we could not cope with it.
- The project has been a source of income for many villagers during the implementation process. It has also helped the co-operative to strengthen. Flooding and erosion has stopped over a period of five years. Nearly the whole land has been closed and livestock farming has stopped.
- No contribution from women. They do not have any information about the land being afforested...

They know that three ponds were built but they do not have any contribution to the project activities or the decision mechanism.

- The only successful project activity was afforestation.
- The villagers did not have trust in the project at the beginning and they thought nothing could be done. In time, with the implementation, the consultation with the villagers, and the participatory approach, the villagers had a positive feeling about the project.
- We can not ask Rural Services to help in the maintenance of the ponds because no one listens to us. When ponds are shared by four or five households the officials do not asked for monetary contribution for cement but if it is an individual pond the villager pays for cement.
- Since the ponds were not built in a healthy way and less cement was used the walls are peeling off.
- About 30% of the planted seedlings have died.
- If they could get back to 1996 they would not have let the project be implemented. Not all that was promised by the project was realized and those that were realized were not done in a healthy way.
- Afforestation has not been completed.
- Market conditions have improved, nowadays you can find anything you want to purchase. But the economic condition of villagers weakens, although we earn much money we can not afford things as we used to.
- ... they had some disputes with a neighboring village about the project activities.
- The villagers were told that the project would provide seedlings, but they have not received any seedlings from the project.
- A hundred beehives were given to five households who had given up livestock farming with the project... some courses were given... some of them could not cope with bees.
- Women do not take part in decision making.
- In general villagers were not satisfied with the project and they were complaining about incomplete activities.
- The villagers had positive feelings about the project because of the rotational closure to grazing (the rangeland selected was to be separated into two or three parts and these lands were to be used for range activities in turn). But this activity was not realized.
- There are 10 poorer households who do not have land in the village. The project did not affect these households either good or bad. Nothing has changed for these households with project implementation but they will benefit from afforestation in the long run.
- In general villagers were not satisfied with the project because not all of the activities that were proposed were implemented... They were complaining about the contractors and weak supervision by Rural Services.
- If the objective of the project is preventing erosion why do they not let us graze in rangeland?
- The villagers did not take part or contribute in labor.
- Irrigation conditions have improved with the project... However the poor are still poor and nothing has changed for the villagers who do not have any land or livestock.
- The project provided water to some of the households but it would be better if it had provided something that would serve all of the villagers.
- There was one pond built but it was banned because it was on rangeland.
- They mentioned that they used to take decisions collectively in the past but in time cooperation and unity have weakened. Participation in the meetings was low... nobody objected to the project but everybody had hesitation that it would not be implemented.
- In agriculture there has not been any change with the project.
- No meeting was held with women for the project.

3. CONCLUSION

All of the views gathered from different parties showed that, for a rural development project, it is very important to have participation of local target groups and local staff who is responsible for the implementation, at the beginning of the project but most importantly, it is crucial for the implementation phase. When we look at the parties' views separately, although they express some difficulties, they insist to say that they have done whatever necessary to complete the project according to original plan. But, since the project expanded from its original coverage in terms of number of province and micro-catchment, and took more time than it was planned, things have changed enormously. Reflection of the centralized implementation agencies' internal problems and regulation discrepancies to the project activities were unpredictable.

It is very well understood that effort spent for the local participation at the beginning did not yield a continuous commitment, because villagers did not involve the implementation phase and they just waited completion of what was decided during the planning period. But at the end of project they were not completely satisfied. Why? There may be few reasons for this. Expected outcomes may have been exaggerated or over estimated by the officials in order to increase local participation. There was an effort for involving locals to decision making mechanism but most of the time they have just expressed their problems, and the best solution to the problem came from the officials of the implementing agencies. This sometime caused another unexpected results as we see in many village.

The problem definition method applied for this project was very new for the villagers in the project area who are not familiar to this kind of approach at all. This also caused greater expectation which was not planned.

As a result, there is not much to conclude since all the parties expressed themselves very openly and gave the all reasons that caused some problems during the project life-span.

4. REFERENCE

- Project Performance Assessment Report, Turkey, Eastern Anatolia Watershed Rehabilitation Project, (Loan 3567-TR), March 19, 2004, Sector and Thematic Evaluation, Operations Evaluation Department, Report No: 28274, World Bank
- Ministry of Environment and Forest, EAWRP Documents
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