SUMMARY EVALUATION REPORT
ON SECTORAL EVALUATION FOR
NATURAL RESOURCE
MANAGEMENT IN PAKISTAN

Projects 4659, 2451 (Exp.1), 4003 and 4377

ABSTRACT

The zones covered by the projects (mountainous regions of the North-West Frontier Province (NWFP), and the North-Eastern Area (NEA); and Balochistan) are the most destitute areas of the country, and their population are the poorest. The mission was satisfied with the positive results obtained from the assistance that WFP had accorded to the reforestation/watershed management initiatives undertaken on state and private lands since the mid-seventies. At the beginning of the nineties, the Government and the donor community realized that the only sustainable solution for the protection of the zones against erosion was the increasing involvement of the local population. The mission’s findings support this rationale and WFP’s leading and catalyzing role. The mission also stresses that the involvement of the communities in protecting natural resources is not only significant for the regions’ ecological sustainability, but should be viewed primarily as a vehicle for enhancing the development of the rural population, particularly of their more vulnerable and disadvantaged segments, and for encouraging the population to undertake new initiatives.

Project initiatives are still at an exploratory stage, and it will still take some time to demonstrate all the effects of the population’s involvement in the management of watersheds. The mission therefore recommends that WFP continue to support this sector in Pakistan until the Village Development Committees and Women’s Organizations are well established. The involvement of women in project activities started only after the introduction of the social forestry concept. Achievements of the projects in this sector are important, although not spectacular. Women are increasingly consulted for the choice of new tree species, and women’s committees are being established in many villages, together with the Village Development Committees. The food stamps system - in lieu of the distribution of food commodities - introduced by WFP in 1995, should be continued. The beneficiaries welcome this system, since it gives them a better choice of food commodities. It is also of considerable benefit to the Government because of sizable savings on distribution costs.

This document is produced in a limited number of copies. Delegates and observers are kindly requested to bring it to the meetings and to refrain from asking for additional copies.
NOTE TO THE EXECUTIVE BOARD

This document is submitted for consideration to the Executive Board.

Pursuant to the decisions taken on the methods of work by the Executive Board at its First Regular Session of 1996, the documentation prepared by the Secretariat for the Board has been kept brief and decision-oriented. The meetings of the Executive Board are to be conducted in a business-like manner, with increased dialogue and exchanges between delegations and the Secretariat. Efforts to promote these guiding principles will continue to be pursued by the Secretariat.

The Secretariat therefore invites members of the Board who may have questions of a technical nature with regard to this document, to contact the WFP staff member(s) listed below, preferably well in advance of the Board's meeting. This procedure is designed to facilitate the Board's consideration of the document in the plenary.

The WFP focal points for this document are:

- **Director, Office of Evaluation:** W. Kiene tel.: 5228-2029
- **Senior Evaluation Officer:** J. Boisclair tel.: 5228-2027

Should you have any questions regarding matters of dispatch of documentation for the Executive Board, please contact the Documentation and Meetings Clerk (tel.: 5228-2641).
BACKGROUND

1. The World Food Programme (WFP) has been involved in Pakistan for about 25 years, working in the North-West Frontier Province (NWFP), the North-Eastern Area (NEA) and Balochistan. In this time, the country’s population has increased from about 61 million (in 1970) to approximately 137 million by mid-1996. In addition, there are approximately one million refugees from Afghanistan, bringing the 1996 population to about 138 million. The current population increase is approximately three percent a year.

2. The growth in population has led to increased pressure on resources, especially those on “common” land and “state” forest areas. Thus, there has been an overall decline in both the size of forest areas and the per-hectare growing stock. Similarly, common land has undergone a deterioration of desirable trees, bushes, shrubs and grasses.

3. The removal of plant cover from forest and common land has affected soil stability and water retention capacity. Some former forest land has been converted into arable agriculture. Many sites are steep and unsuitable for this kind of land use without terracing; thus, erosion has accelerated, endangering two large dams, the Tarbella and Mangla reservoirs. These dams control the water-supply flowing into the irrigation networks and are principal sources of hydro-electricity. Forty percent of the watersheds for these two dams and other rivers feeding into the Indus and Jhelum rivers lie within the country in NWFP, NEA and the Northern Areas. These watershed areas are remote, mountainous and have thin soils. Pastoral agriculture and the extraction of forest products are the principal occupations. Arable agriculture was confined to the flat lands and valley bottoms, but population pressures have forced many people to farm on steep slopes. The same pressures have brought about an over-exploitation of forest and grazing areas, resulting in a decreased carrying capacity of domestic animals on rangelands and a reduction in area and growing stock on forest lands.

4. The forests in these catchment areas occupy not more than 20 percent of the land area of 9.2 million hectares. Degraded rangeland accounts for the bulk of the area (62 percent), with scrubland, non-degraded rangeland and rain-fed agricultural land accounting for six percent each. Trees contribute about 30 percent of Pakistan’s energy demand. Fuelwood also accounts for about 90 percent of all annual wood use (50 million cubic metres), with poles and sawn wood accounting for about five percent each. Forests and trees provide forage and fodder to about 30 million domestic livestock, one quarter of the total.

5. The goals of the WFP-supported watershed projects in NWFP and NEA have included the protection of soils, the control of water through the construction of check dams, the improvement of grass stocks, herbs and woody biomass, the sustainable management of these resources and the increased off-take of products to contribute to the growing demand for these goods and related services. In Balochistan, the goals of the WFP-supported project are to enhance rain-water infiltration in order to raise water tables, to restore some of the former underground irrigation system (karezes) and to stabilize the shifting sand dunes.
PURPOSE AND SCOPE OF THE EVALUATION

6. Several WFP-assisted watershed projects in Pakistan have been evaluated on previous occasions. The missions concluded that these projects were successful: tree cover in the WFP intervention area increased; donor interest in supporting the sector increased; and the initial reluctance of land owners was replaced by enthusiasm. However, the decisions related to watershed management on state land and subsequently on large owners’ private lands were taken by the Forestry Department with little, if any, involvement of the population. The species to be planted were decided by the Forestry Department without taking into consideration the needs of the population. Even the management of the reforested private lands was decided by the Forestry Department. Over time, the Government and the donor community realized that sustainable development in the mountainous regions of Pakistan would be feasible only with the involvement of the population (big and small land owners and landless peasants). In the beginning of the nineties, the Government of Pakistan shifted its strategy accordingly.

7. This sectoral evaluation is designed to shed more light on the new people-centred approach and on the role of WFP. Findings and conclusions of the mission will be the basis for drawing lessons for similar projects of this type. The mission studied the effects of WFP assistance on the population and on the natural resource situation of Balochistan, NEA and NWFP, in four projects: Pakistan 4659 - Environmental rehabilitation in Malakand Division of NWFP; Pakistan 2451 (Exp.1) - Tarbella and Mangla watersheds; Pakistan 4003 - Rural development in the North-East Area of Pakistan; and Pakistan 4377 - Rural development in Balochistan. The mission also looked at the impact of the 25 years of WFP support on the natural resource base of the areas, and at the new food distribution strategy introduced at the beginning of 1995. It focused on eight major issues:

   a) Approach and implementation strategy;
   b) Catalyzing role of WFP in the forestry sector;
   c) Benefits and targeting of WFP assistance;
   d) Participatory approach;
   e) Effects on the natural resource base;
   f) Impact on women;
   g) The food delivery system through food stamps; and
   h) Structuring and sustainability of future projects.

PERFORMANCE ASSESSMENT

Approach and implementation strategy

8. WFP was a pioneer in developing activities in the remote and resource-poor areas of Pakistan. This was a logical approach, for these regions were the most food-deficit areas of the country. These areas provided asylum to people fleeing from the fighting in Afghanistan. The refugees and their domestic animals were over-exploiting the meagre natural resources and causing further deterioration of an already fragile ecological environment.
9. Initially, the WFP-assisted projects were planned without much reference to the people living in the areas. Tree species were chosen by the Forestry Department and the grasses by the pasture experts. Over time, there was a gradual broadening of species planted with fodder and fruit-trees, with the local population consulted and increasingly involved in species selection.

10. The WFP-supported projects have evolved from tree-planting activities on state and private land, through watershed activities, to people’s participation in land-use and land development initiatives on all types of land, via social forestry. This “participatory approach” to land use and development is still in its formative stage. Since the bulk of the area is degraded rangeland, the long-term goal must be to rejuvenate these areas and to improve the living conditions of the local population.

11. The new approach obliged the Forestry Departments in the project areas to undergo a considerable change. Previously, forests were protected from people, many of whom were regarded as potential destroyers of forests. Now the emphasis has switched to using forests and trees as instruments of development to assist people and encourage them to sustainably manage their natural resources.

12. Each of the four WFP-supported projects is currently at a different stage of development vis-à-vis a social forestry approach. The needed revisions to the project documents are being officially approved in different ways. The provincial, followed by the federal, governments have to approve changes before the budget can be allocated. The WFP plans of operations have to be amended according to the changing strategy. The lengthy process of the approval of revisions delayed the implementation of the projects. However, common programme themes for a people-centred approach are slowly emerging across the four projects. The main themes are:

- establishing, with communities, management plans for land-use or tree-planting interventions, protection and control;
- involving land owners, landless labourers - men and women - in site and species selection;
- enhancing participation and the ability of local communities to be involved in decision-making and in managing, monitoring and evaluating their natural resources;
- enabling communities to take on self-help initiatives, and cost-sharing and responsibility in skills development in the management of natural resources; and
- focusing on integrated sub-catchments (micro-watersheds) as units of development.

13. The current project development has not focused on the training of the communities in the maintenance and protection of the trees planted, the environment awareness-raising of the population or the involvement of women as managers of trees and grasses.

**Catalyzing role of WFP in the forestry sector**

14. Current and past projects in the watershed areas of the Tarbela and Mangla dams have reforested about 220,000 hectares and have undertaken soil and water conservation measures on approximately 70,000 hectares. To put it in context, the various WFP projects have covered only about five percent of the watershed areas. However, efforts over the past 25 years have demonstrated that land reclamation is possible, especially through the planting of trees.
15. The positive results of the WFP-assisted projects have attracted other donor agencies and
development banks into these resource-poor areas. WFP is working with four bilateral
donors (Australia, Germany, Italy and the Netherlands) and two United Nations agencies
(FAO and UNDP) on its various projects. The World Bank and the Asian Development
Bank are now providing loans for the development of natural resources.

16. WFP has had a strategic role, as it has the Government's confidence after working for more
than 25 years in areas not initially supported by other donors. WFP has used its experience to
advocate community participation in the planning, design, implementation and evaluation of
projects. It has promoted the inclusion of men’s and women’s concerns (gender-strategic
needs) in the design of new projects. While WFP could not eradicate poverty in these areas, it
could, through food aid, support the population to create assets and develop sustainable
management tools to be attractive to other donors and banks.

17. WFP has set out a coordination mechanism between all the WFP-supported natural
resource management (NRM) projects. During quarterly meetings, the technical assistants
and the forestry staff of all the WFP-supported projects exchange information on the
achievement of the objectives of their respective projects and propose solutions to common
problems.

Benefits and targeting of WFP assistance

18. In spite of its generally positive assessment, the mission noted with concern the
unavailability of needed aggregate data on target population, beneficiaries and
and corresponding budgetary allocation. For example, the mission was informed that the
number of beneficiaries is as follows: 90,000 direct and 511,800 indirect beneficiaries;
however, the statistics are not disaggregated by gender, socio-economic status or
income-level.

19. The zones of supported activities reflect WFP’s mandate. Projects are located in zones that,
if rehabilitated, would improve national food security in Pakistan by ensuring proper
irrigation water, maintenance and energy from Mangla and Tarbela dams. These zones are
made up of isolated food-deficit villages and hamlets. They have a high population density,
limited employment alternatives to forest activities, and insufficient arable land to meet the
basic food needs of their population.

20. The immediate beneficiaries of previous WFP food assistance were landless labourers. All
direct beneficiaries were men. They were almost exclusively the poorest of the rural poor, the
elderly and those impeded from searching for alternative employment because they are the
only male of the family. In the new participatory approach, these groups continue to be the
direct beneficiaries of food aid, but some women also become direct beneficiaries by raising
seedlings on private nurseries and protecting the new plantations on communal lands.

21. The initial tree-planting was undertaken on state lands (located on steep slopes). The
community as a whole benefited from a better forest cover, providing improved grass and
protection against erosion. In a further step, WFP assistance moved towards watershed
management involving reforestation and protection on large privately-owned land. The
choice of species and the land-use plan were established by the Forestry Department.
Although the main longer-term beneficiary would be the owner of the land, the community
would benefit from improved grass and firewood provided through the pruning of trees. Upon
maturation of the trees, the population of the zone could hope for forest-related employment
opportunities. The broadening of emphasis from tree-planting to watershed protection
provided more job opportunities to local people and gave access to goods and services. Road
building opened up isolated areas; gully plugging and terracing decreased erosion and increased the infiltration rate, thus directly benefiting agriculture. Improving pasture and controlling grazing increased the carrying capacity of the land and provided grass for stall feeding.

22. With the need to undertake work on communal land, the approach changed to involve the community as a whole. The low-income people, including women, benefited more from the social forestry activities, because they were consulted about plans for common land initiatives and they could benefit directly from tree nursery activities, fruit-tree growing and improved grass production. They also benefited from the training opportunities in group formation and exposure to development activities in other communities.

23. The earlier approaches to development were top-down, while the participatory approach tends to benefit the entire community through the population’s active involvement in the establishment of Village Development Committees and Women’s Organizations. This approach involves the population directly in land-use and development plans for their areas. For the first time, these village organizations have brought many different factions together and, concomitantly, led to a resolution of many long-standing disputes.

**Participatory approach**

24. In Pakistan, WFP is moving towards a natural resource management strategy. Each supported project is reorienting its programme activities towards social forestry and the participatory approach. However, most of the projects are only at initial stages of addressing gender concerns and gender-specific issues in programme activities, and of using different types of participatory methods.

25. Three types of community village committees are emerging in WFP-supported projects. The Joint Forest Management Committee (JFMC) is one type of village organization under project 2451 (Exp.1). It is located in the areas (higher grounds) of state lands. The JFMC receives technical assistance in preparing a management plan and has the services of field foresters from the Forestry Department. No other subsidies are given, and all other forestry costs (replanting felled areas, maintenance, protection) are borne by the JFMC. The JFMC is concerned with illicit cutting and helps the Forestry Department control it and fine those involved so that wood can remain in the community. The committee members select species they wish to plant (or replant) for fodder and fuel and collect their seeds. They are also involved in controlling grazing, particularly by the animals of nomads.

26. The second type, under projects 4659 (Malakand Division, NWFP), 4377 (Balochistan) and 4003 (Suketar), is the Village Development Committee (VDC), which is a representative village organization preparing and applying a village land-use plan and land management units. All the members of the community (large and small land owners as well as landless peasants) participate in the decision-making process. Their role and needs are considered. The approach includes three outputs: a village profile and assessment of dispute-free area, a village land-use plan and map, and a management agreement signed between the Forestry Department and the VDC for implementing the plan.

27. The third type is a village organization and/or women's group. Many NGOs are developing such groups in communities that are usually not homogeneous, often split and stratified, and have no tradition of working together. In many areas of Pakistan, including the WFP-supported areas, women seldom even visit another woman’s house outside their family. Hence, it is unusual for them to meet and discuss their concerns and it will take time for these groups to learn how to work together and gain experience in managing specific projects.
28. The application of the participatory approach in NRM projects in Pakistan is a recent effort. It is therefore early to measure its impact on the population. However, the mission concluded that the process initiated is the only one that promises sustainable development for the area and its inhabitants.

**Effects on the natural resource base**

29. In the areas of WFP intervention, the effect on the natural resource base has been considerable. With WFP assistance, successful natural resource development on private lands has already brought benefits to owners and the people living in the areas. Sawmills have opened up in northern NEA as a result of planting poplar and false acacia (*Robinia pseudoacacia*). In Suketar (NEA), land owners have turned barren lands into orchards and productive agricultural plots through water catchment initiatives; fast-growing eucalyptus plantations have been established on reclaimed sterile lands.

30. Now the challenge is to repeat the same kind of success on the communal lands. This will be a more difficult undertaking, as there are many owners and possibly conflicting interests. Given this situation, the participatory approach appears the most suitable way to proceed.

**Impact on women**

31. The situation of women in Pakistan needs special care. Their movements are restricted; in many instances, women are not allowed into the fields and in some areas not even allowed out of the family compound. The current policy of the Forestry Department discourages hiring women as foresters; thus, all female staff hired in the WFP-assisted areas are project staff.

32. The WFP office in Pakistan adopted a Gender Programme of Action in 1995. More female staff were hired, gender training has been initiated for project staff and a gender-disaggregated database is being established. However, the programme is only one year old. Breakthroughs would not be expected for at least another five to seven years, depending on the regularity of training and support services and funding. Therefore, it is premature to evaluate the effectiveness of the work plan at this time.

33. In the last year, female staff have been recruited in all projects except No. 2451. However, their overall number remains small, and some are not properly trained in social and natural resource development skills. However, most are highly motivated and are attempting, under very difficult situations, to establish programmes in spite of resistance. They are making progress slowly and persistently.

34. To date, the major impact of project activities on women is in:

- providing an opportunity for women who are unrelated to meet, exchange ideas and organize activities which can help the community as well as themselves;
- raising self-confidence and interest in their rights;
- creating interest in setting up productive income-generating activities other than selling milk;
- providing technical assistance on tree-planting, fodder and grass cutting, vegetable gardening and fuel conservation, all activities which can help women improve household food security;
• fostering stronger advocacy on men's VDCs, and encouraging Forestry Department staff to acknowledge women's roles in the collection of fuelwood, fodder and grasses, and to consider women's preferences for tree species when developing land-use plans and choosing tree species.

35. However small at this stage, this programme has encouraged men foresters to work with women and has contributed to changing attitudes towards women earning income.

36. In 1994 WFP reviewed the opportunity cost of its food distribution strategy. Following this review, the Pakistan country office experimented with and implemented the provision of food stamps in lieu of the direct distribution of several commodities. The beneficiaries exchange the stamps for the food commodities of their choice, in selected food stores located near project sites. The Pakistan Bait-Ul-Mal (PBM), a federal organization that functions autonomously, manages the food stamp system. WFP provides wheat for monetization to the Government, and the WFP country office buys food stamps from PBM. Originally, the Government was purchasing the wheat at subsidized prices, but the mission was informed that the Government has agreed to purchase the commodities at the commercial rate.

Food delivery system through food stamps

37. Only women who have set up private tree nurseries have received food stamps. Payment of nursery work by food stamps differs by project. In project 4003 (Integrated Land Management project), if the women maintain 5,000 healthy plants, they receive 300 rupees a month each plus one rupee per healthy plant; in project 4659, they receive 2,500 rupees each every three months.

38. The recipients welcomed this system, which gave them a better choice of goods. It was also of considerable benefit to the Government, as it saved considerable sums of money on internal transport and distribution costs. The main constraint in the use of food stamps is the increasing delays in receiving from WFP donors the wheat that is monetized for the purchase of food stamps.

39. The current daily value of the food stamps is 30 rupees. Remuneration of the workers is complemented by 30 rupees in cash provided either by the Forestry Department or bilateral donors (Australia, Germany or the Netherlands). Even though the statistics indicate that the minimum rural wage in the areas of WFP’s intervention is approximately 60 rupees, the mission was informed that the remuneration in the nearby villages is higher (80 rupees a day). The review by the mission of the cost of commodities in the selected stores indicated some price differences from area to area. The beneficiaries interviewed indicated that their monthly remuneration was insufficient to cover the food needs of their family. The mission recommended to the project authorities that these issues be reviewed in depth and adjusted where necessary.

Structuring and sustainability of future projects

40. WFP plays a unique and strategic role in enabling the marginal areas of Pakistan to establish community groups, build assets and develop community self-reliance through labour-intensive food aid programmes and technical assistance.

41. The increasing emphasis on social forestry still does not fully recognize that participation means women's as well as men's. In a society where male and female communication among strangers is socially unacceptable, there is no woman social forester to provide technical support for bringing gender perspectives into watershed land-use planning activities.
42. For replicability and sustainability of a social forestry approach through projects, there is a need for the institutionalization of such an approach by the Forestry Departments.

RECOMMENDATIONS

43. Recognizing the unevenness of information related to the new approach, the mission recommends that the WFP country office and the Government upgrade their monitoring system in order to facilitate a continuous follow-up of the issues addressed in this report and in the summary recommendations presented below.

Approach and implementation strategy

44. The impact of the food incentive will increase if it is provided to a number of initiatives in the same village, e.g., road construction, reforestation, terracing, tree nurseries. Where possible, a link should be established with the Social Action Programme sector assisted by WFP to encourage parents to send their girls to school.

Catalyzing role of WFP in the forestry sector

45. The WFP office in Islamabad should continue to play a coordinating role for all the WFP-supported projects in the NRM sector. WFP should also use its strategic position with the Forestry Departments to encourage the change of laws for the employment of women as foresters in NWFP.

Benefits and targeting of WFP assistance

46. The monitoring system should include a gender and social database monitoring system to better determine the benefits of the new participatory approach for the intended beneficiaries.

Participatory approach

47. Project staff should be trained in building project activities that enable social groups to address their problems in natural resource management.

48. The Village Development Committee members should be trained in management and organizational skills in the forestry sector to enable them to take responsibility for the development of their area.

Effects on the natural resource base

49. In order to improve forestry management and financial returns from the forest, resource use plans should be drawn up for all mature forest areas; these should automatically become part of all micro-watershed development initiatives.

50. An extension workbook should be prepared so as to improve and disseminate the knowledge of successful practices. This workbook would document activities, methods used, constraints and successes, be shared among project authorities and become part of the watershed management programme.

Impact on women

51. To improve the systematic training and creation of women’s groups, women staff (organizers, extensionists and promoters) should develop quarterly work plans. Plans would
include a programme for: natural resource management training, development of social organization skills, supervision of the activities and training needed by the women.

52. To integrate gender awareness into programmes, more female social foresters need to be hired and forestry staff trained in gender-related issues for resource management planning and development.

The food delivery system through food stamps

53. The mission recommends the continuation of the food stamps scheme for the NRM projects in Pakistan. The WFP country office should undertake a thorough review of the system as early as possible. This review would compare the value of the commodities bought with the food stamps, the number of accredited stores, and the price differences from area to area.

54. To ensure that the forestry sector wage is fair, the mission recommends that WFP, the donors and the governments undertake a survey of the situation of the semi-permanent forestry and nursery workers. The survey would collect data on family size, wage rates, prices of the food bought and other income or coping mechanisms to cover the basic needs of the beneficiary and his family.

Structuring and sustainability of future projects

55. The mission recommends that WFP continue its support to the NRM sector in Pakistan. However, future assistance should be part of a programme in which all projects have the same objectives, monitoring mechanism and incentive value.

LESSONS LEARNED

56. Food aid is a useful incentive to undertake natural resource management activities. The experience of Pakistan has shown that the pioneer efforts of WFP in the most remote areas can demonstrate the successes of government initiatives and become a catalyst for other donors.

57. In Pakistan, food aid is rightly not used as an incentive to initiate the creation of Village Development Committees, but it constitutes an important encouragement to undertake new initiatives. However, to fulfil this function, it is necessary to ensure a regular flow of the food stamp incentive in order to gain and maintain credibility with project beneficiaries.

58. It is difficult to provide traditional food-for-work assistance directly to women in Pakistan. Such assistance should be phased in gradually with the introduction of new activities.

59. The food stamps system is a good distribution mechanism in a country like Pakistan, where the distribution network is well established and efficient throughout the country.