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SUMMARY THEMATIC EVALUATION REPORT ON THE USE OF FOOD AID FOR WFP SOIL AND WATER MANAGEMENT AND CONSERVATION: PROJECTS IN LATIN AMERICA

Bolivia 3866 - Development of depressed rural areas

Peru 5162 - Ecological rehabilitation of small watersheds in the Andean zone

Nicaragua 4571 - Socio-economic rehabilitation of the population affected by the war

	Bolivia 3866	Peru 5162	Nicaragua 4571
Total food cost	8 932 720 dollars	7 424 600 dollars	7 664 871 dollars
Total cost to WFP	12 916 467 dollars	9 463 480 dollars	11 420 779 dollars
Date of project approval	June 1990	June 1993	December 1991
Date plan of operations signed	March 1991	September 1993	February 1992
Date of first distribution	December 1991	July 1995	October 1992
Duration of project	Five years	Four years	Five years
Official termination date	November 1996	June 1999	October 1997
Date of evaluation	September/October 1996	September/October 1996	September/October 1996
Composition of mission	WFP/FAO ²	WFP/FAO	WFP/FAO

¹ The thematic evaluation was coordinated by a WFP evaluation officer. The full report is available on request, in Spanish only.

² The mission was composed of an economist, FAO, and an expert in water and soil management, FAO.

ABSTRACT

This thematic evaluation is based on widely differing experiences in terms of design, methodology, scope and institutional organization, and can therefore be considered representative of the situation in Latin America.

It is evident that the concentrated action approach, which focuses on geographical areas representing specific parts of a watershed (high, middle and low) makes it possible to demonstrate that: soil erosion is reduced and water resources increased; production increases as a result of both increased yields and the introduction of new crops; community participation is given priority in identifying needs and solutions by implementing practices on a large scale; and ecological and environmental sustainability is guaranteed.

The Guatemala and Peru projects are enabling WFP to satisfactorily comply with its essential mandate to eradicate hunger and poverty, since soil and water conservation activities based on the concentrated action methodology increase the output of staple foods and raise the incomes of the small farmer units being assisted, in addition to curbing the migration of households by generating employment opportunities for them on their own lands.

In the case of the Bolivia and Nicaragua projects, WFP has only partly complied with its mandate because the projects have a multi-purpose approach and cover multiple activities. Moreover, soil and water conservation activities based on the micro-watershed approach in the various project components have very little effect on the total amount of food distributed.

The evaluation of the Guatemala 2587 projects and the analysis of the Peru, Bolivia and Nicaragua projects show that soil and water conservation projects designed around this methodology can be replicated in similar projects elsewhere, particularly in depressed mountain areas occupied by low-income small farmers.

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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.

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INTRODUCTION

1. This thematic evaluation has been carried out in accordance with the new policy adopted by the WFP Evaluation Office, of focusing evaluation on specific themes in order to highlight experiences from them that can be applied to satisfactorily comply with WFP's essential mandate, namely, to assist populations living in conditions of extreme poverty and food insecurity. This evaluation is also intended, in harmony with WFP's Strategic and Financial Plan: a) to improve WFP's familiarity with the results of past experience and its effects on future actions; b) to contribute to evaluating appropriate policies; and c) to contribute to the preparation of specific operational procedures based on these strategic decisions.
2. In most Latin American countries WFP is supporting development projects or project components aimed at soil and water conservation and management. These projects or components offer WFP evident comparative advantages over other types of development projects. Yet the Evaluation Office, which has evaluated the operations of several such projects and components, has detected substantial differences in terms of their design, the methodology used, the availability of non-food inputs, the institutional organization, the disbursement of counterpart funds, and the use of project monitoring and evaluation systems.
3. For this reason, the Evaluation Office took advantage of the evaluation of project Guatemala 2587 - Soil and agro-forestry conservation in depressed areas, conducted in mid-1995, to draw from it a number of lessons which might be applied to other similar projects or components.
4. Bearing this in mind, and taking project Guatemala 2587 as a model, it was decided to carry out a thematic study by analysing the three projects mentioned above relating to the implementation of soil and water conservation and management activities. This study was based on analysing documents, monitoring the implementation of the projects, and interviewing technicians and beneficiaries. The main objectives of the study are:
 - a) to draw general lessons from the positive or negative aspects of the practical application of a concentrated action methodology to micro-watersheds in Latin America; and
 - b) to recommend strategies and practical procedures to apply to other WFP projects of this type in order to improve the economic, social and food self-reliance of the beneficiaries (particularly women in a rural environment), to enhance the active and organized participation of the beneficiaries and adopt a more efficient technical approach to agricultural systems, geared to the market, while at the same time assuring the sustainability of small farms.



MAIN OUTPUTS OF THE PROJECTS

5. **Appropriateness of projects vis-à-vis initial planning.** The immediate objectives of the four projects more clearly reflect the different concepts underlying their design in comparison with project Guatemala 2587, taken as the model. The immediate objectives of the projects analysed include the following:

Guatemala 2587:	to reduce soil erosion in order to improve water retention in the project areas
Bolivia 3866:	to enable the beneficiary communities to enhance their food security and have access to agricultural markets and other services by establishing community infrastructure to protect the farm lands
Peru 5162:	to restore and enhance the productive capacity of water and soil resources in small watersheds by undertaking appropriate conservation work
Nicaragua 4571:	to rehabilitate livestock and crop production in order to increase beneficiaries' food availability

6. Project Peru 5162 is the only one of the three whose objectives and activities are specifically designed for soil and water management and conservation, like Guatemala 2587. The purpose of the project is to redress the ecological damage in 65 watersheds in the Peruvian Andes, restoring the production capacity of 56,600 farmers. These activities include soil and water conservation, rehabilitation and management, seed production, setting up revolving funds, and training the Andean communities in improved techniques for growing Andean crops. This ensures the application of the concentrated action methodology.
7. Project Bolivia 3866, on the other hand, covers a wide range of objectives, including: supporting the construction of rural roads, providing drinking-water to small farmer communities, improving their housing, building community and storage centres, reforestation, setting up a revolving fund to support the production and marketing of their output, implementing training programmes, and increasing assistance to schools attended by poor children. Although since October 1994 the project has been implementing a component with soil and water management and conservation features, and the concentrated area concept with a micro-watershed approach is being applied to it, the project itself is not based on the application of the concentrated action methodology.
8. Project Nicaragua 4571 is currently implementing activities designed for: agricultural production and soil conservation, production and social infrastructure, training and credit. The agricultural production rehabilitation component is helping to promote soil conservation and reforestation measures, in addition to a number of other actions to raise the output of basic grains, bananas, plantains and vegetables, and rehabilitate coffee and cocoa production and rangelands.
9. **Beneficiaries.** The criteria for selecting the beneficiaries of the four projects differ enormously. The Guatemala and Peru projects focus on the primary selection of environmentally degraded zones, and the subsequent application of beneficiary selection criteria within those zones. Conversely, the Nicaragua and Bolivia projects are designed to



cater for families living in areas of extreme poverty. The beneficiaries are members of small farmer communities with firmly established indigenous cultures, in which the households possess plots of land that are generally in the three climatic levels or latitudes into which the micro-watersheds are divided (high, middle and low) and are entitled to use community lands dedicated to grazing and woodlands.

10. The selection criteria applied by the Guatemala and Peru projects are based on the assumption that in the environmentally degraded areas in the mountainous zones there are small subsistence farmers whose production units are characterized by low incomes and a high risk of food insecurity.
11. In the Bolivia and Nicaragua projects, on the other hand, many of the activities that have been implemented, including the soil and water conservation components, have been designed mainly for people living in small rural communities with virtually zero food production potential, all living in the same state of extreme poverty. The producers benefiting from these projects are individual owners of the land allocated under the agrarian reform for ex-combatants or returnees.
12. The producers in Guatemala and Peru are small subsistence farmers who do not generally have more than five hectares of land available to them, one or two of which are used solely for the production of their staple foods. The producers in Tarija (Bolivia) taking part in the micro-watershed management component with WFP assistance are also subsistence farmers and possess livestock, farming an average of three hectares, of which only a fraction is used for staple food production for their families. In Nicaragua, the beneficiaries are subsistence farmers with about 3.5 hectares of land, of which they farm between one and two hectares.
13. **Women's participation.** The three projects analysed in this thematic study, as well as the Guatemala project, were not designed to include gender issues in order to differentiate and estimate the degree of women's participation. However, in the rural zones in the countries studied, women played a preponderant role. Both in Peru and in Guatemala, where work is carried out in groups under a system of mutual aid between all the farms in a community, the role of women is very extensive. It should also be noted that in Peru work is assigned on a gender basis for each activity. In the micro-watersheds, women's committees have been set up to involve the women more broadly in soil conservation work. In Nicaragua the same situation applies, but this is because of the large number of households headed by women. In Bolivia, women's participation is due to the temporary migration of the men, mainly in the dry season (between four and six months) during which the women are left to look after the farms.

ANALYSIS OF KEY THEMES

14. **Relationship to WFP policies.** The analysis has shown that there was a lack of uniformity in the four Latin American projects in terms of the design of WFP projects that are wholly or partially aimed at implementing soil and water conservation activities. This lack of uniformity in the design suggests that WFP lacks theoretical and practical benchmarks to be used as the basis for preparing projects of this type.
15. The soil and water conservation and management activities in mountainous areas of Latin America using the micro-watershed-based approach are perfectly compliant with WFP's essential mandate of eradicating hunger and poverty. In Guatemala and Peru, for example, it was found that the projects had generated increased productivity (of between 30



and 50 percent) of basic grains per hectare, improved crop diversification towards horticulture, substantially rehabilitated degraded and eroded soils, and increased their humidity retention. All these factors have had a positive impact on the beneficiaries' incomes and on household-level food security.

16. This type of project (as indicated in the evaluation of project Guatemala 2587) has proven financially, economically and socially sustainable, as evidenced from the application of the FARMOD program to this project. This program has made it possible to calculate the Internal Financial Rate of Return (IFRR) and the Internal Economic Rate of Return (IERR), the evolution of the net household income and of household food production, the household demand satisfaction index, and the level of household labour use.
17. WFP's experience in the countries of Latin America has shown that the "food-for-work" methodology is the best of all the alternatives currently available for supporting small farmer communities with soil and water rehabilitation and management. Credit is a secondary priority compared to these specific activities, because the peasants' economic rationale is to reduce risks to the minimum rather than exploiting the benefits to the maximum. For this reason the application of a "money-for-work" methodology would not be positive because it would distort the monetary economy of the peasant unit.
18. **Comparative advantages of food assistance.** The food-for-work methodology has evident comparative advantages over other forms of aid as far as soil and water conservation activities are concerned, since most of the work required for such activities demands a great deal of unskilled labour. The positive effects of this work, like any other similar type of investment, only emerge several years after completion. This is why small farmers without financial reserves of their own to support themselves are reluctant to perform them unless they are given some compensation for the income lost as a result of implementing this work. Ecological deterioration therefore continues.
19. Projects of this type are also warmly welcomed by the small farmer economic units, particularly because of their rapid results in terms of increased staple food production for household consumption, increased possibilities for market-oriented crop diversification and the curbing of forced male migration in the dry season to other areas of the country with a strong demand for unskilled labour.
20. They also encourage greater coordination, financing and complementarity between their activities and those of other international cooperation projects, NGOs, and voluntary organizations (peasant organizations, indigenous peoples' organizations). Furthermore, the projects tend to make small farmers and government and private technicians much more aware of environmental issues; this tempers individual production attitudes and actions, making them more rational. This eventually consolidates small farmers' organizations.
21. **Micro-watershed approach.** The effects of all these activities are enhanced to an extraordinary degree when they are integrated into a micro-watershed as a means of solving the global problems of this the range of altitudes (high, medium and low). The improved relationship between water, soil and plants, together with the synergistic effect, is a very important element which must be borne in mind when appraising outputs.
22. Experience in the four countries studied, particularly in Peru, has shown that micro-watersheds must be defined in terms of the climatic and altitude levels and the degree of ramification of the water courses, and must be adjusted to an average surface area of between 1,000 hectares and a maximum of 15,000 hectares, according to the capacity of the unit responsible for implementation.



23. **Technical features of the projects.** The technical measures with the greatest impact are modular. The ideal module of integrated soil and water management practices and activities begins with the initial implementation of the physical works (stone bunding, seepage ditches, contour furrows, terracing, etc.) subsequently complemented by biological activities (reforestation, hedges, sowing of rangelands, green manure, controlled enclosures, fertilizer units, etc.) to ensure greater sustainability of the physical facilities. Once the two types of work mentioned above are completed, but not before, mini-irrigation system construction can be promoted. This integrated soil and water management sequence ensures the sustainability of the work carried out.
24. Generally speaking, 80 or 90 percent of the cost of the physical and biological practices and activities relates to unskilled labour. In the case of mini-irrigation, on the other hand, between 80 and 90 percent of the total cost is for construction materials, machinery, and skilled services and inputs. Nevertheless, mini-irrigation is the technology that makes it possible for groups of small producers to enhance the value of their lands, double their agricultural acreage, diversify their crops and, more important still, more effectively and appropriately find an effective and convenient market entry for high-value agricultural commodities.
25. The best results are also obtained in micro-watersheds or communities which, thanks to the project, have created their own artisanal, simple and low-cost local mini-irrigation schemes. Unfortunately, except in the case of Guatemala, the technicians are not aware that this practice forms part of the repertoire of soil and water management and conservation activities, and must be the goal towards which they should work. This is mainly due to a lack of training and experience with managing mini-irrigation systems.
26. The widespread tendency among technicians not to consider mini-irrigation as the ultimate aim or purpose of their work in every community or micro-watershed is also due to the lack of public and private entities to provide or finance the non-food items needed to act as an incentive to undertake this type of work (construction materials, water hoses, sprinklers).
27. **Beneficiary participation.** Implementing these soil and water management and conservation activities promotes the wholesale participation of every member of the peasant community, because it demands enormous amounts of unskilled manpower. More important still is the fact that it encourages the consolidation of associated groups to take care of the work, and strengthens the spontaneous organization of peasant groups and gives new functions to them.
28. The participation of peasant women in implementing these activities is very high indeed, particularly when acting in groups or as communities in planning and implementing the works. The main reasons for such a high level of participation are the resultant substantial and rapid increase in agricultural and livestock production, the greater possibilities for crop diversification and the reduced need for men to migrate.
29. The best results are obtained in micro-watersheds or communities where participatory diagnostic systems or prior surveys are carried out in order to establish, calculate or quantify the aggregate value of all the investment needed to solve the problems that exist, regardless of the date on which the work is actually implemented.
30. Knowing the aggregate cost of the investment that is required to solve the environmental problems in a micro-watershed also helps to justify the time needed to support and assist each micro-watershed or community. This obviates the need to lay down fixed working periods which not only fail to solve the problems, but also leave the micro-watersheds or



communities in a situation similar to the one they were in originally.

31. **Selecting areas and beneficiaries.** Specific soil and water conservation projects, particularly those based on a micro-watershed approach with concentrated action, make it possible to apply better and more precise criteria for selecting the beneficiary population. These projects are generally designed to support clearly delimited areas suffering from serious environmental degradation, but with a potential for improvement. Generally speaking, these are extremely poor areas, inhabited by subsistence farmers' households with the lowest incomes in the rural sector and suffering from long periods of unemployment and migration.
32. The small farmers supported by the four projects studied are small subsistence farmers possessing less than 10 hectares, and farming plots no larger than two hectares with staple crops, with incomes below the national minimum wage, and long periods (between 100 and 150 days a year) of under-employment or unemployment. The peasants participate in the project in groups, and each household has an average of seven to eight members.
33. **Institutional framework.** The ideal form of organization for projects of this type is when the official counterpart organizations in each country are the public institutions responsible for agricultural extension and for disseminating technological information regarding the way of addressing the situation with a view to solving natural resource deterioration problems.
34. When soil and water conservation activities form part of an assistance programme component, the institutional organization is normally based on a national counterpart authority belonging to a ministry responsible for social affairs. This clashes with the technical consistency and capacity upon which the implementation of the work should be able to count. It is far better for the national counterpart authority to be a public institution responsible for natural resource management and conservation, as far as coordination with NGOs and the international cooperation projects with technical know-how in this field is concerned.
35. The better the technical competence of the national counterpart, the greater environmental awareness the peasant farmers and technicians will acquire, giving a new rationality to their individual productive actions and attitudes. Micro-watershed management training helps to consolidate the peasant organizations. It is easier to get an approach based on the micro-watershed principle to gradually form a concept that becomes part of the common sense of the peasants and technicians when only few entities (no more than five) are involved in implementing these activities, and do so in a coordinated manner.
36. **Function of food assistance.** This type of project makes it possible to enhance the function of WFP's food assistance because in addition to being an incentive for rural labourers to take part in building up community infrastructure, it also encourages the producers to group together in associations, and creates a new awareness of the importance of protecting and managing the environment and of the benefits that this brings. It also reduces migration to towns in search of resources when the harvests are depleted.
37. A further important contribution or function of food assistance, in the case of exclusive soil and water management and conservation projects using an approach based on the micro-watershed principle (Guatemala and Peru), is that it helps to support the technical capacity of government organizations by developing the technological information to be disseminated among producers and technicians in order to solve environmental problems in the peasant rural areas. Food aid also makes it possible to implement large-scale works in less time.



38. **Monitoring and evaluation.** Exclusive natural resource management and conservation projects with a micro-watershed-based approach possess all the features needed to apply computer programs to simulate and compare the "with project" and the "without project" situation. This exercise provides quantitative and qualitative measurements of the physical, biological, economic and social impacts of the production units, micro-watersheds and projects.
39. Nevertheless, the monitoring and evaluation systems that have been set up in the projects under study are mostly used to provide data on the management and the physical targets set for them, but they do not provide any qualitative information on their effects or repercussions.
40. The Nicaragua and Guatemala projects, which have WFP-trained personnel to process the FARMOD and COSTAB programs developed by FAO and the World Bank, are the best equipped to set up, in the short term, an information system that will make it possible to carry out a financial and economic analysis of the communities and the micro-watersheds covered by the projects, and the crop yields of these projects.
41. Another shortcoming which has reduced the possibilities of attracting funding for this type of project from the donor community and the NGOs stems from the limited use of systems to gather, record and process data on the physical and biological impacts of the projects. If this series of data and their presentation in graphic form or in three-dimensional drawings (using computerized images or tables) were used, this would make it easier to appreciate the results on a year-by-year basis of the activities implemented by the project.
42. Sustainability. The sustainability of this type of project is achieved once the peasant groups have received and subsequently apply on their own all the necessary technical know-how to perform soil and water management and conservation activities, and basically when the producers' groups first begin to reap the benefits of these practices. This situation normally occurs in the second or third year of the project in the micro-watershed.
43. In all the countries visited, producers were applying the same technical recommendations made in the projects, but not all of them received food in exchange for their work. Many of the peasant groups forming part of these projects have also done more than the projects have actually supported, because their interest outstripped the resources assigned by the project to their particular micro-watershed. This application of the technical information by the peasants and their involvement and participation in the decision-making process are promoting self-sufficiency; hence, sustainability is ensured.
44. However, it was noted that sustainability can be affected by two main factors: a) the relationship between food-supported activities and all the work to be carried out at micro-watershed level in order to obtain the best results; and b) the continuity of the technical assistance needed to implement new and increasingly burdensome activities that have to be performed even after food assistance has been discontinued.
45. **Applicability.** Both the evaluation of project Guatemala 2587 and the analysis of the other projects studied, particularly those in which a micro-watershed approach with concentrated action is being applied, show that the design of this type of soil and water management and conservation project in degraded rural areas can be replicated in other similar countries (with Andean or mountainous zones occupied by small farmers), subject to compliance with the technical conditions set out in the next section on Recommendations.



RECOMMENDATIONS

46. On the basis of this analysis, the thematic evaluation recommends the following specific procedures to be applied to future projects of this kind.
47. **Relationship to WFP policies.** In its policies for productive development projects in this sub-sector, WFP must adopt the design of this type of project. Moreover, particularly in the Andean and Central American countries, WFP's efforts in the rural sector should focus on supporting projects that give priority to soil and water conservation activities in homogeneous zones, biased towards the use of approaches based on the micro-watershed principle.
48. Water and soil conservation activities must not be implemented as part of multi-purpose projects, or projects whose most important objectives are social in character. It would be appropriate to devote a specific project to those types of activities. Yet these projects should be able to dovetail with community social activities hinging around gender issues in order to obtain the best socio-economic benefits.
49. **Technical conditions.** Soil and water management and conservation projects must be designed in compliance with the following technical conditions:
 - a) they must be based on the application of a methodology which focuses on the micro-watershed geographical space. Micro-watersheds must be defined taking account of the degree of ramification of the water courses and should be geared, approximately, to an average area of not more than 10,000 hectares.
 - b) The basic technical features of such schemes must be modularity and comprehensiveness. The intervention modules should include actions in the high, hillside and valley parts of the micro-watersheds, and should include physical, biological and water management activities.
 - c) Priority should be given to activities designed to enhance food self-sufficiency, and the involvement of the small farmers in the market economy, with special emphasis on the installation of mini-irrigation systems.
50. The methodology and technology used in these projects must be designed to disseminate appropriate localized small mini-irrigation techniques which can grow in a modular manner. The installation of mini-irrigation systems should be the aim of all activities performed in the micro-watershed, because these foster crop diversification and incorporation into the market.
51. **Beneficiary participation.** The beneficiaries should always participate in groups, using a gender approach. Encouragement must be given to the formation and consolidation of peasant groups and the participation of women at executive levels on natural resource management and conservation committees or commissions. Participation by women in project management improves household food security, reduces migration by the men and cuts down the time spent to fetch fuelwood and water.
52. Beneficiary participation should begin with participation assessments or prior assessments of needs and possible solutions. In this type of project a long period of assistance for each micro-watershed or community should normally be planned. This support period should emerge from a real participatory planning process conducted jointly with the communities, once the project has been set in motion.
53. **Institutional organization.** In this type of project, the national counterparts should be



public entities responsible for technological information and the strategic methodology to be applied in order to solve natural resource degradation problems, and always with the aim of increasing the productivity of staple foodstuffs and diversifying crops. Account should also be taken of the training components for technical extension and mini irrigation systems management.

54. In projects of this type, NGOs should also be encouraged to take part in the implementation together with other international cooperation projects following the guidelines and technical messages laid down by the national counterpart. The participation of peasant organizations should also be reflected in the institutional organization of the projects by enabling them to be represented in the institutional organization as community committees which would eventually become natural micro-watershed authorities or commissions. The eventual establishment of these micro-watershed commissions or authorities should be one of the projects' objectives.
55. **Area and beneficiary selection.** The criteria for selecting the beneficiary population for these projects should be laid down by selecting the degraded areas, bearing in mind that it is in these areas that the peasant households work and live, and that they suffer from the greatest risk of food insecurity. In addition, they have the lowest rural incomes, and many of them are headed by women.
56. The main criteria applied by these projects for selecting beneficiaries should be their status as persons living in an environmentally degraded micro-watershed, but one which has rehabilitation potential, because this is the situation that has to be changed in order to improve the socio-economic conditions of small farmers. Likewise, complementary criteria must be set to decide which of the families should be given priority within the selected micro-watershed, in terms of poverty levels, the precarious nature of employment, the need to migrate and the number of households headed by women.
57. **Monitoring and evaluation.** Monitoring and evaluation systems for this type of project should include, as a matter of course:
 - a) the use of computer programs specifically designed to estimate the economic and financial impacts on the rural families, the members of the community and micro-watersheds, and project participants;
 - b) the application of systems for collecting, recording and processing data on the physical and biological impacts achieved by the projects.
58. The socio-economic impacts can be measured using the FARMOD program developed by FAO and the World Bank, which has been specifically designed to appraise the economic and financial benefits of projects, both to the farms and to the members of the community and micro-watershed. This program also measures the effects of the project on household labour, household consumption levels and off-farm work. It would therefore be appropriate to train micro-watershed project officials to use the FARMOD program.
59. With the series of data on physical and biological impacts, a three-dimensional graphic representation should also be generated (using models or computerized images) of the changes brought about in a limited number of micro-watersheds. This visual information could be used to help people understand the results being produced, year by year, as a result of the activities implemented by the project.



