
Possibility of Creating a Network of NGOs Working in Irrigation Management Following the NAF Model

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Summary Statement

The Nepal Agro-Forestry Foundation (NAF) is a Science and Technology (S/T) oriented, non profit making NGO dedicated to enhance agro-forestry among people of low economic level through participatory "bottom up" approach and also acting as a clearing house for agro-forestry support services and a network for the same. Agro-forestry is considered by many as a forest related-science which is not always true. Nepali farmers have been practicing agro-forestry on their farmland for centuries and sustaining their agriculture and livestock. NAF is now interested to introduce S/T in the management of these farm agroforestry activities of the poor people by introducing participatory group efforts to the users. NAF has inherited the experience working with such people for 15 years and based on this experience has developed certain goals of which networking and clearing house is one. This may be applied in the formation of irrigation system management by the users groups. NAF's activity is like a triangle with research, training and extension as its three sides and they are all interlinked. Each of these components are focused towards the users and users and NAF function as equal partners. There are several NGOs who are in contact with NAF and these have benefitted by NAF support system and vice versa. It is proposed to extend the "bottom up" development system by asking beneficiary groups of 5-15 to nominate one of their members to participate in NAF organized trainings during which the whole focus will be on their needs and problems. In order to expand this concept of development, NAF also conducts exposure sessions to administrators and policy makers. This process of expanding its activities may be adapted by IIMI and others if a true participatory irrigation management program is developed. The paper is supported by five annexes to explain (i) farm agroforestry concept, (ii) steps to be taken to develop a users group (PO/NGO) network, (iii) concept of user centered Agroforestry program, (iv) trainee centered "bottom up" training concept and (v) technical difference between "Involvement" and "Participation".

Introduction

"NAF" (Nepal Agro-Forestry Foundation) is a Science and Technology oriented, non-profit making NGO established with the objective of networking various NGOs and users groups (POs) actively involved in an overall sustainable agro-forestry system development for resource poor people, through their participatory "bottom-up" activities. It also acts as a clearing house for agro-forestry support service.

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What is Agro-Forestry?

Since the word 'Agro Forestry' or Krishi-ban in Nepali, was introduced into our development vocabulary a little over a decade ago, in connection with the reclamation of degraded forest back to economically viable forest, most farmers, policy makers, scientists and others consider this as a forestry science and activity. This is true when someone talks in terms of forest.

However, Nepali farmers, particularly of the mid-hills, have been growing fodder trees and grass in their cultivated, unirrigated lands at odd corners, for centuries. They grew and maintained fodder trees like badahar (*Artocarpus lakoocha*), kutmiro (*Litsea polyantha*) koiralo (*Bauhinia variegata*), Kabro, Khanayu, nevaro (all *ficus* sp.) and grasses like amleso (*Thysanolaena maxima*) Chitray banso (*Degetaria* Sp), Kutil Kosa (vetch) and many others. Often fruits trees were also planted. Total land was utilised efficiently to meet their fodder requirement. Animals were well fed and so farm sustainability and economy was well maintained. Nothing bothered them when things were plenty, but now the situation is different. Science and technology must now be applied to this kind of vegetation management or farmer oriented agro-forestry. NAF is focusing its support in this kind of agro-forestry concept, in which Leguminous trees and grasses, useful as fodder, get the priority. They are planted stet terrace slopes. In this way, poor denuded land is permanently turned into farm forest. Present land under agricultural crops is not disturbed. Trees and plants are recycled, not man. In the pure agroforest land management concept "Forest trees get the priority." Alleys between rows of forest trees are cultivated for agricultural/cereal crops like maize and finger millets or cash crops like ginger and peanuts. After 10 years or so most trees are tall. Agricultural crops are discontinued and farmers shift to a new site. Man is recycled much ahead of the new forest (Annex No.1)

NAF's NGO and PO Ancestors and Experience

NAF is one of the outcomes of approximately 15 years of a tri-partite partnership efforts and experiences of Bahdha-Bahunipati Family Welfare Project (BBP) under Family Planning Association of Nepal (Nepali NGO), local people/user groups (PO's) and World Neighbors (a US based NGO) who financed the Project. The objective of BBP was to study the impact of integrated community development inputs on family planning acceptance with economically depressed classes in Nepal. One such community selected for study was a small Majhi community of about 100 households, a little above the small village bazar of Bahunipati on the bank of Indrawati river in Sindhu Palchowk district.

Project staff decided to try in 1978 an exotic fodder tree, *Leucaena* (Ipil Ipil) already tested in 1977 for its adaptability under Bahunipati condition, as an entry input for more intensive development activities. Five farmers agreed to plant a good number in their "bari" lands. Three came out with 80% survival rate and were willing to plant more and be demonstrator farmers. One lady farmer planted 5000. Ipil Ipil extension was integrated with other aspects of community development like irrigation, drinking water, sanitation and livestock development. The area program was intensively supervised, supported with regular follow up and training to be developed as a demonstration village. Table 1 summarises the change between 1983 and 1989. This village became a training cum extension - demonstration site for the farmers by the farmers and other interested GOs, NGOs and INGOs. Interested institutions requested training and technical support programs. Linkages were thus established with NGOs like Tamakosi Sewa Samiti of Ramechap, Non-formal Education Service Centre, Dhadhing, Save the Children Federation, Redd Barna, UMN, Action Aid and others. This training

facility site has shifted to Heguawapati nursery in Kavre Palanchowk district about half an hour drive from Panchkhal on the same road to Bahunipati.

Table 1
Progress of the Majhi Village 198-1989

Item		Year		
	83	86	89	
Leucaena adopters %	3	85	90	
Livestock increase %		40	NA	
Livestock improved 5%		54	NA	
Animal sale Rs.	15,000	195,600	383,000	
Cropping intensity	100	-	241	
Food one year family %	13	50	73	
Per capita food/day	-	402Gr.	518Gr.	Country av 505 gr
Population growth %	-	3.5	1.9	Family planning impact +

All this was too much of a load for BBP and World Neighbors. While this particular fodder tree and the effective training methodology attracted more people and organizations, one problem that always haunted the project staff, donor and consultants was the rapidly advancing Ipil devastating psyllid, insect which started moving west from Florida in 1983 to Hawaii, Philippines and Indonesia and then towards the Asian mainland. This insect, as expected, appeared in Nepal in 1989 summer. BBP and World Neighbors had already started policulture styled agro-forestry in which local fodder trees and grasses were included besides exotic ones and psyllid resistant varieties of Ipil. Trials were conducted at Sindhu Palanchowk, Kavre Palanchowk, Ramechap and Dhading with the help of local farmers, NGOs and consultants.

While this particular fodder tree Ipil Ipil and its pros and cons, interest of NGOs in agroforestry became essential to keep abreast with the demand and it was too big a load for BBP and World Neighbors to handle. Agro-forestry Advisory Service was organized in Sept 1988, to meet the demand. The above organizations and other technical individuals were invited to join. To further strengthen and support agro forestry activities through appropriate research, extension and training this Advisory Service was renamed and registered as Nepal Agro-forestry Foundation in 1991. It thus inherited more than a decade of tripartite participatory poverty alleviation experience in community development and in agro forestry and capitalized on it. It has already established links with likeminded NGOs and now is in the process of developing a suitable network. (Annex No. 2)

NAF's Goal

It is focussed on Human Resource Development of interested NGOs and POs through objective oriented participatory training to:

- a) restore loosing soil fertility and protect it.
- b) better and more fodder for livestock.
- c) meet fodder, fuel and timber requirements of individuals from their own bari and denuded land and so indirectly reduce pressure on community or national forest.
- d) increase the number of NGOs with farm based Agro-forestry programs replicating what some NAF supported NGOs have done.
- e) establish a NGO/PO/ Beneficiary network to extend agro-forestry in Nepal through "bottom up" planning, and finally.
- f) be a clearing house for agroforestry information, inputs and plant materials.

How NAF Operates?

NAF administration is run by an Executive Director (ED) who is also the Member Secretary of the Executive Board. At present he is also the Chief trainer and extension worker. NAF is too young at this stage to have many staff although the ED has adequate field and office staff. The executive Board consists of 7 elected members from the present members of 25. The Executive Director post is paid.

NAF activities are all beneficiary farmer or user focused (Annex 3). They are expected to participate in all fields of research, training and extension to promote S/T in agro-forestry in the villages. For example:

- a) Research starts with users' feed back and problems as they are in the field. Research is conducted in their fields with their participation (Ref Annex 5 for definition of participation). Management is the responsibility of the participating farmer. He is also a demonstrator, an extensionist. The NAF researcher collects data and analyses it and communicates the findings to the concerned farmer/s and any other person or institution/s interested in knowing the results. NAF has several such reports.
- b) Training is conducted by experienced farmers trained as trainers so that training become practical, objective oriented and therefore worthwhile for the trainees. NAF draws upon a pool of qualified and experienced professionals for special sessions. All farmer training are participatory. Training are also extension oriented. Rs. 200/ per day per trainee is charged as training fee to include tuition, training materials, lodging and food. Fees are negotiable for small NGOs and similar POs.
- c) Extension is from farmer to farmer or through present link-NGOs. NAF is trying to reduce the gap between extension with training. NGOs are requested to form users groups of 5-15. They nominate one of their members as a group trainer to receive technical and extension skills in Training of Trainers (TOT) sessions. He is expected to transfer the skills he acquired

during training of trainers to other group members as a volunteer. This volunteerism has made training and extension effective at "no cost" (Ref Annex 4).

NAF also provides brush-up/follow up training to support extension. For example, at one stage NAF shifted its quarterly training to field sites of group leaders at their request. This gave an opportunity for everybody to participate more in exchanging their views and ideas, learn more and teach more. It also was a mini clearing house and a network at the same time. Training and extension efficiency went up.

NAF visits link/network NGOs-POs as follow up after training to make extension effective. NAF also has been arranging one day exposure sessions at its new training site at Heguawapati Nursery of BBP for administrators, policy makers, agriculture and forest graduates, GOs, NGOs, INGOs and others. It is expected that this will lead to the establishment of an more effective agroforestry network and clearing house idea.

Currently, NAF is working at 6 NGO sites in supporting 16 community project nurseries and 28 home nurseries and it provides partial support to 20 NGO and GO projects in their agro-forestry promotion activities. There is a plan of expanding NGO development projects to a total of 10 NGOs within the next few years. Good working relation have been established particularly with the Ministries of Agriculture and Forestry who are interested in conducting research activities with the farmers as per NAF model.

NAF is at present supported by the Ford Foundation financially, with World Neighbors/Nepal providing office space and logistics while BBP provides training site facility.

Scope of Establishing an Irrigation NGO Network

Details of how NAF developed and wants to proceed towards network and clearing house development has been presented. Of late there are other organizations working hard under strong leaderships to establish NGO networks with specific objectives. For example:

- a) NGO-Federation Nepal's basic aim is to create a network with mainly the grassroot NGOs at district and national levels, conduct development policy research, act as catalyst and pressure group to promote people centered development policies and programs and provide clearing house service to its members.
- b) NGO-Forum stated its Strategy Planning Session (25 Oct 1991) objective as an attempt to develop a communication network of NGOs.
- c) SAP-Nepal objective is to build linkage among voluntary agencies and community groups in South Asia and in Canada in the spirit of equal partnership.

If these four NGO groups, including NAF, are taken as a sample to analyze the possibility of substantiating a NGO network, all have:

- a) focused on grassroot POs/NGOs using words like "people centered" "bottom up" and "equal partnership",
- b) expressed the need for linkage, network and clearing house for the benefit of associated NGOs/POs, and overall development of the country, and

- c) however, NGO-Federation and NGO-Forum does not state a specific need for any major GO or INGO role.

This workshop rightly envisages NGOs having a role in water users organization and expects NGOs to provide training, conduct research and undertake information/ communication exchange activities, (which equals extension related to irrigation) to facilitate transfer of power and management. NAF has exactly this kind of experience which has been very clearly explained earlier.

It has been stated in the workshop objective (No. iii) that rural based NGOs will be organized to implement irrigation activities developed by GO and the private sector network. If this is the interpretation of objective iii, it is a "top down" approach not consistent with the "bottom up" 50-50 participatory approach which NAF and its link NGOs follow. (Annex 5)

Objective (iv) (c) is to "match rural NGO capability with agency and project consultants "needs". If any progress is to be made in networking

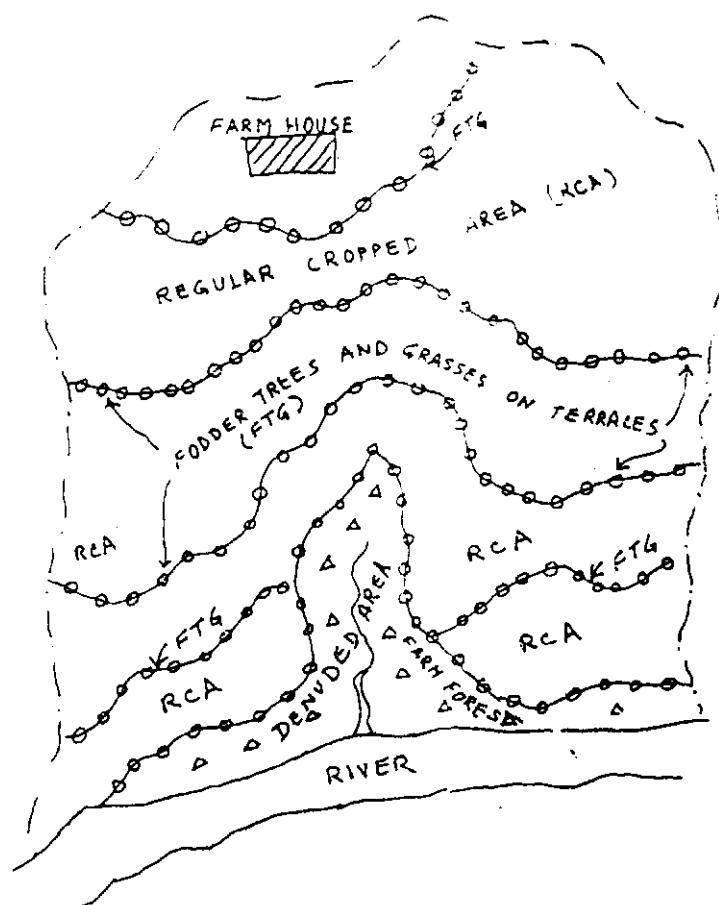
for training, research and extension, in fact any development work for the grass root people, agency and project consultants' capabilities should fit into the PO/NGO needs and not the reverse. This is how NAF, its staff and consultants practice, without which NAF would not have so many link NGOs.

There is a big scope of introducing S/T in irrigation management for NGOs. There is a lot to learn from them before launching a program for them.

Suggestions to Foster and Sustain any NGO Focused Network

- a) Define "Irrigation Management". Otherwise IIMI will have the same problem as NAF in making people understand agro-forestry.
- b) Develop one good farmer centred research-training-extension site.
- c) Seek the full participation of the users/beneficiaries in the design planning, implementation, management and evaluation of what you do. Honour their feedback.
- d) Help NGOs to coordinate programs with government activities to maintain national integration.
- e) Plan ahead with long term goals and objectives. Baseline data is essential to convince people about accomplishments as well as planning.
- f) Careful monitoring and follow-up is a must with good record keeping practice.
- g) Farmer trainers and project staff must understand the participatory approach.
- h) Integrate other 'felt need' programs if it supports the overall program.
- i) It is very essential to integrate skills, attitudes and ideas of donors, consultants and management with that of the users as equals.
- j) There should be free socialization opportunities among these groups.

CONCEPT OF AGRO-FORESTRY IN AGRICULTURE AND IN FORESTRY



Leguminous trees and grasses, useful as fodder get the priority. They are planted on terrace slopes on their tops. Fodder is harvested all year round in a sustainable manner. Poor denuded land is permanently turned into farm forest. Present land under agricultural crops is not disturbed.

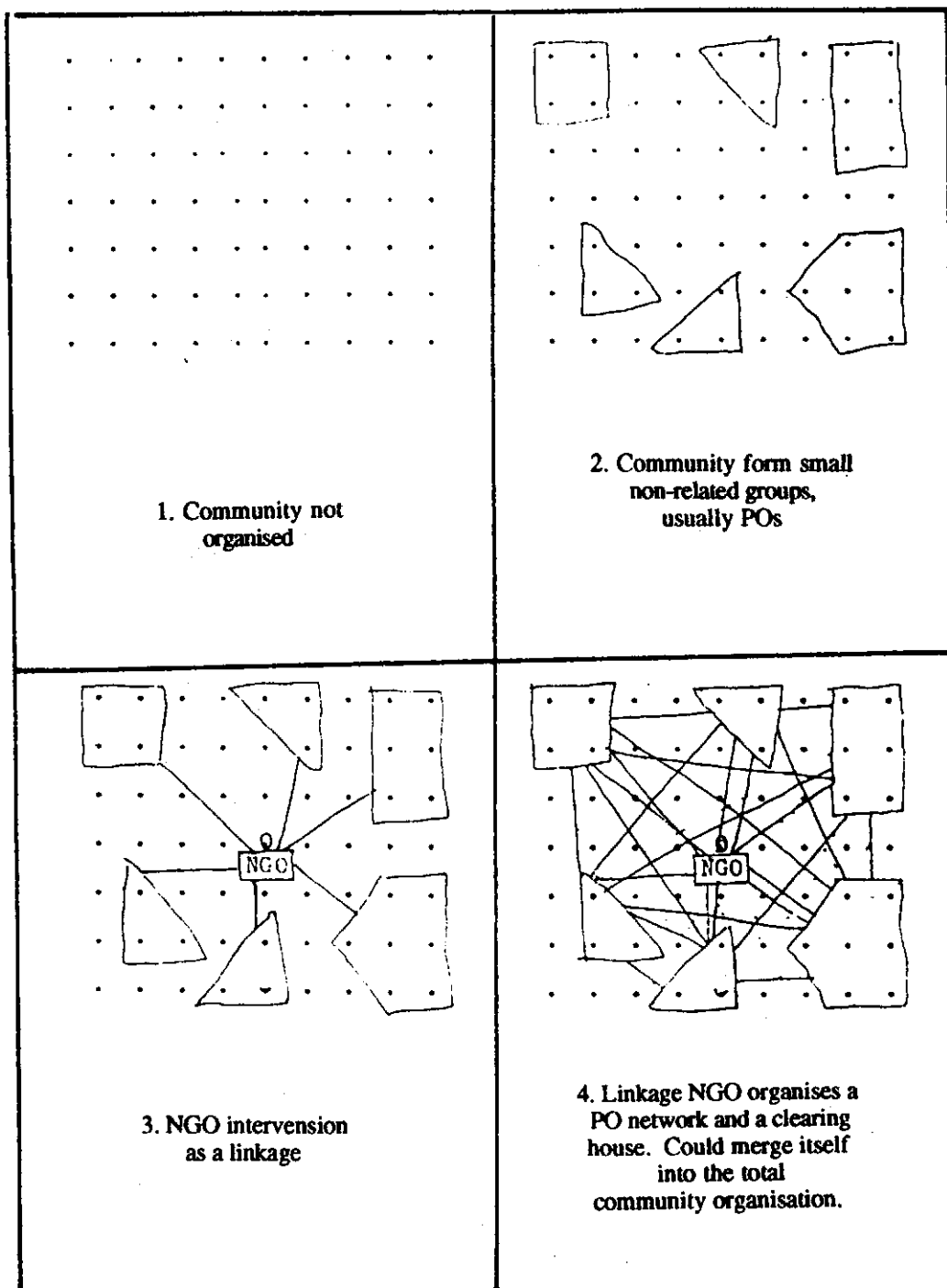
FORESTRY CONCEPT

Forest trees get the priority. Alleys between rows of forest trees are cultivated for agricultural/cereal crops like maize and finger millets or cash crops like ginger and peanuts. After 10 years or so most trees are tall. Agricultural crops are discontinued and farmers shift to a new site.

MAN IS RECYCLED MUCH AHEAD OF THE NEW FOREST

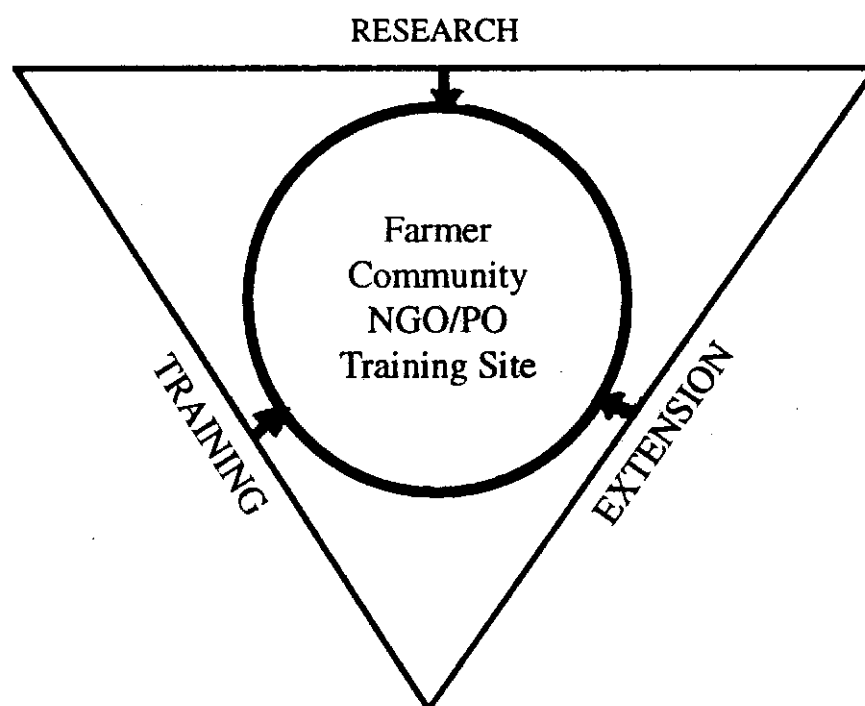
ANNEX No. 2

STEPS FOR DEVELOPING A NGO NETWORK



ANNEX No. 3

Concept of User Centered Agroforestry Programme

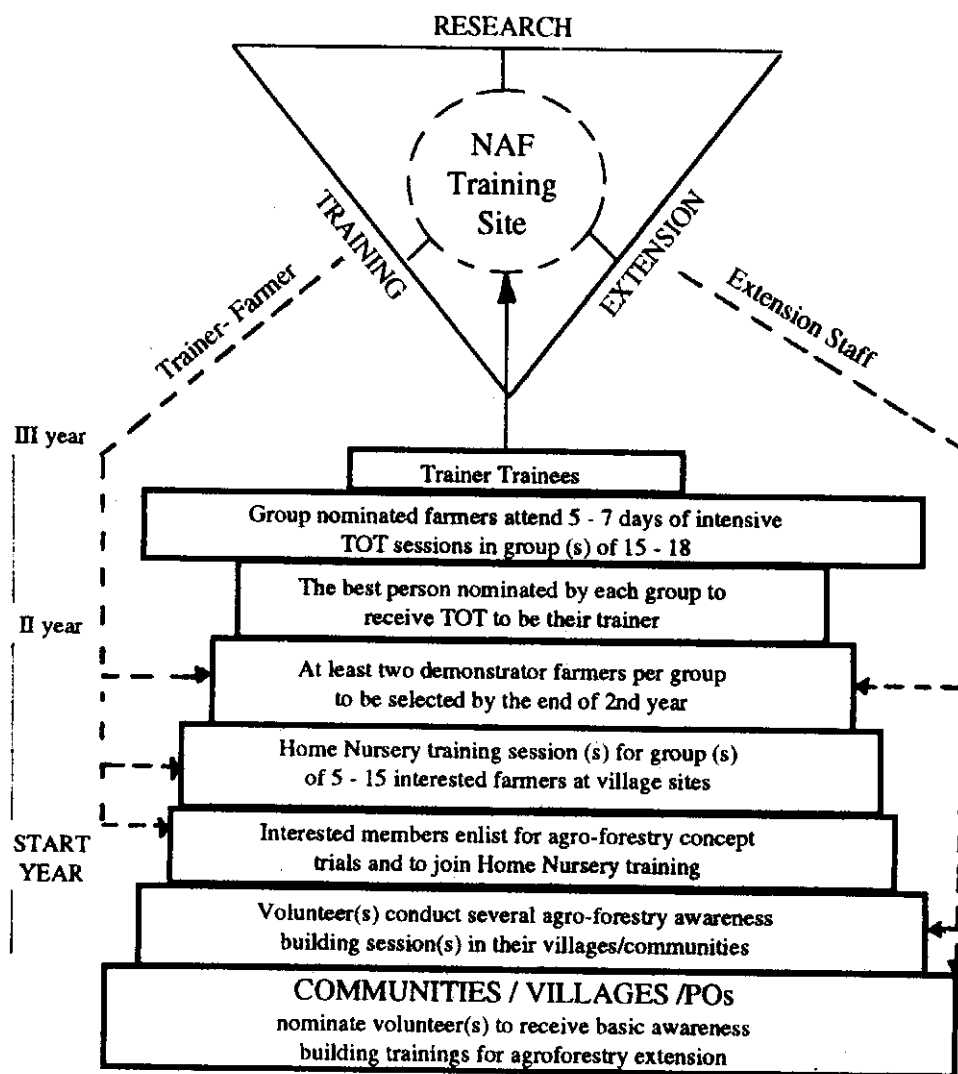


The Nepal Agro-Forestry Foundation Triangle

ANNEX No. 4

Trainee centered "bottom-up" training concept

The NAF Traingle

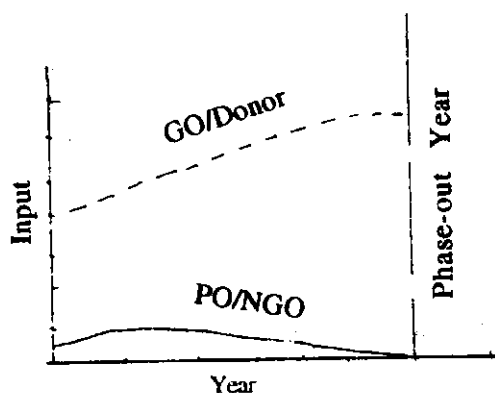


ANNEX No. 5

TECHNICAL DIFFERENCE BETWEEN "INVOLVEMENT" and "PARTICIPATION"

Involvement

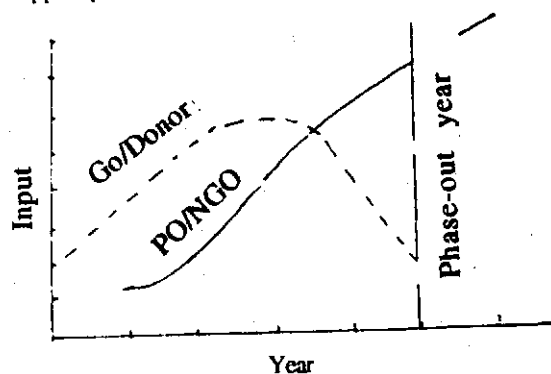
1. May appear in the middle of a project or form the start as an appendix (Road Clearing)
2. Easy to start. Investment of time and money may fade away once non-local support phases out



3. Objective may not be clear to associates.
4. People will work as told. It is therefore top-down and authoritarian.
5. Insensitive towards results. May not develop ownership feeling.
6. Book-keeping is not clear
7. May not be cost effective.

Participation

- Should appear from the very start of a project on an equal responsibility partnership basis to include
- a) Concept development, b) Project planning, c) Programming, d) Budgeting e) Project operation and f) evaluation. (Community drinking water)
- Time consuming and difficult to start. Time and money investment of users increases. Result will be long-lasting and sustainable even after non-local support phases out



- objective must be made clear to each of the associates.
- Will work as a team to fulfill stated objective. It is bottom-up and democratic.
- Pride of ownership and the joy of accomplishment.
- Book-keeping is clear at all times.
- Cost effective in most cases.