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PLANNING BUREAU
SECRETARIAT GENERAL
MINISTRY OF FORESTRY

THE STUDY OF ENHANCING THE ROLES OF LOCAL COMMUNITIES IN THE DEVELOPMENT OF FORESTRY RESOURCES

THE NATURAL RESOURCES MANAGEMENT PROJECT (THE NRM PROJECT)

FINAL REPORT

1993

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PREFACE

The final report of the study, titled "Enhancing The Roles Of Local Communities In The Development Of Forestry Resources" through HPH Bina Desa Hutan /Forestry Village Development Program Run By Forestry Concession Rights Holders/BDH is completed in 1993 using "Regulations For HPH Bina Desa Hutan" and the Terms Of Reference bearing the same title, as references.

The report focuses on the program's components contributing to the realization of the welfare of communities living within, and around, the work area of the Forest Concession Rights Holders, which is the first stipulated goal the BDH program, and the sustainability of forest resources, as the second. It does also focuse on the approached, strategies; organization, administration, management and support delivery systems, all of which are highly oriented to popular active participation needed in the process of realizing the BDH's goals.

The completion of this report owes much to the support, assistance, and facilities kindly rendered by the Ministry of Forestry's and the Forest Concession Rights Enterprises' management from top to field level, the National Development Planning Board, the USAID, the International Timber Trade Organization, the Provincial Governments of west and Central Kalimantan including their technical agencies, the University of Tanjungpura, and the local communities of BDH project participants. The consultant team of PT. Ardes Perdana assigned to undertake the study, express their heartfelt gratitude and appreciation, hoping that the study results could serve as one of the many formative inputs requred for the improvement of the current BDH program.

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PLANNING BUREAU
SECRETARIAT GENERAL
MINISTRY OF FORESTRY

EXECUTIVE SUMMARY

THE STUDY OF ECHANCING THE ROLES OF LOCAL COMMUNITIES IN THE DEVELOPMENT OF FORESTRY RESOURCES

THROUGH PROGRAM HPH BINA DESA HUTAN / BDH

(FOREST VILLAGE DEVELOPMENT PROGRAM RUN BY FOREST CONCESSION RIGHTS HOLDERS)

I. INTRODUCTION

1. Study Background

The total forest land area under the Natural Forest Land Use Plan/Tata Guna Hutan Kesepakatan / TGHK is about 143 million hectares, 109 million hectares out of which, which is the present forest covered area, is considered to be an effective forest cover. The total area under logging concessions is about 60 million hectares, but the actual production forest within concessions amount to about 43,3 million hectares. Conversion to other uses and allocations for plantations amounts to about 6.5 million hectares leaving about 36.8 million hectares as the actual operational natural production area within the concessions.

Rapid decline of natural forest covered area as a negative effect of deforestation has recently been increasing. Clearance of forest area for setlements (transmigration, new development and expansion of towns), mining, wildfires, logging both legal and illegal, shifting cultivation, and illegal harvesting of forest products, continuously widespreads. Without effectively preventive and repressive measures againt the now on-going deforestation activities, the natural forest covered area is feared to be totally wiped in out within 20 years since 1991. To stop this real threat, the Ministry Of Forestry is pursuing policy targets in three general areas i.e. production, protection, and participation. The participation policy is to insure that proper views and relevant expertise of all parties affected by, and involved in, forest-related activities are incorporated into those three ministrial policies based on recognition that the increasing pressures on forestry resources could not be effectively, efficiently, continously and sustainably eased and eventually eliminated unless active participation of all parties affected by, and involved in, forestry resources development is also effective, efficient, countinous and sustainable.

One of the various implementation programs of the participation policy in forestry resources development is BDH. The Forestry Ministrial Decree/Decision Letter No. 691/Kpts-II/1991 concerning The Roles Of Forest Concession Rights Holders In Developing Communities Within And Around Forest states that the goals of the BDH program are the established community welfare and the sustained forest resources. The forest concession rights holders are to manage and be responsible for the successful implementation of the BDH program. The Long Term, Five Year and Annual BDH Plans are to be respectively an integral part of the Long Term, Five Year, and Annual Forest Exploitation Plans. The Director General Of Forest utilization is designated decision maker of guidance for forest concession rights holders, the Director General Of Reforestation and Land Rehabilitation is designated decision maker of BDH program implementation. Heads of the Regional Offices of the Forestry Department are designated officials for program evaluation and control, heads of the Provincial Forestry Agencies are designated officials for program monitoring and supervision.

This study is aimed at the identification of the BDH's current status, problems, and constraints, and hopefully able to propose acceptable and applicable recommendations for the improvement of all BDH aspects in order that the planned goals of the program could be realized within a reasonable timeframe. In the course of the study, the development of the BDH projects in Central and West Kalimantan Provinces are the objects of in-depth and comprehensive observation activities. The selection of these two provinces is based on the fact that about 40 % of the active Forest Concession Rights Enterprises throughout Indonesia, two projects closely related to BDH activities i.e the on-farm level training project sponsored by the USAID, and the social forestry development research project sponsored by Germany; and three Forest Concession Rights Holders whose BDH's are reported to be most successful in Indonesia; operate in these two provinces.

2. Methodology of Study

Consistently referring to the Forestry Ministrial Decree No. 691/Kpts-II/1991 most particularly the goals and purposes of BDH, the Decision and Circular Letters of the Director General Of Forest Utilization concerning the BDH management; and the Terms of Reference for the study received by PT. Ardes Perdana, the consultant team undertake activities in the following order:

2.1. Plans and performance reports study, compare the study result with the findings of field observation visits of projects the success of which requires beneficiaries' active participation in all projects' management stages and processes, such as watershed development projects in Java, INPRES Regreening Projects in Java and in the outer islands, and Tree Crop Smallholder Projects in nine provinces outside Java. The study tries to identify the positive and negative effects of the approaches and strategies; organization, administration, and management systems; projects' delivery

systems, and their respective instruments applied, on the realization of the planned inputs, outputs, purposes and goals.

2.2. Reports study on similar projects in several developing countries in ASIA, Africa, and Latin/ South America, aimed to identify the same aspects as stated in point 2.1. above.

2.3. Compare the results of activities stated in points 2.1 and 2.2 above with the empirical experiences of, and the theoretical theses known to, the consultant teams to identify the strengths and weaknesses of those projects, using the known goals and purposes of BDH as criteria of achievement.

2.4. Synthesize the results of activity in point 2.3 with the results of field force analysis applied on the existing regulations issued by the Ministry of Forestry. The results are systemized and used as formative inputs in formulating interim BDH program.

2.5. After the discussion and the improvement of the interim BDH program at the Forestry Ministrial level, the interim program's acceptability and applicability qualities are tested by the BDH implementation programmers (17 BDH Project Management Unit managers representing 42 Forestry Concession Rights Enterprises), 2 BDH evaluation and control officials, 2 BDH monitoring and supervison officials, one representative of Tanjungpura University in charge of forestry research activities and diagnostic studies; and one representative of the Provincial BAPPEDA in charge of coordination of rural development and INPRESS for Underdeveloped Village planning. This activity uses a type of pilot training course as medium, which is simultaneously used to collect information, ideas, aspirations, criticisms, proposals felt necessary for the further improvement of the interim BDH program, and to measure participants' knowledge of, skill and experience in, BDH project implementation.

2.6. To measure the extent of correlation between the qualities of the course's participants with the actual BDH project's performance at the field level, the consultant team undertake a rather in-depth and comprehensive observation of 16 BDH projects in Central and West Kalimantan Provincies. Information rendered by the managers of the USAID and the Germany sponsored projects are used as supplementary and complementary inputs to the findings of the field observation activities.

2.7. The findings got from the pilot training course are compared with those from the field observation, and subsequently analized. The result of comparison are incorporated into, and used as formative inputs in the improvement of, the interim BDH program. These activities produce the draft final report of the study.

2.8. The draft final report of the study is discussed in a workshop attended by the BDH policy and decision makers of the Ministry of Forestry, the top management of the Forest Concession Rights Enterprices, the representatives of the National Development Planning Board, the USAID, the ITTO and other parties concerned with BDH. The results of the discussion are used as formative inputs in formulating the Final Report of the Study.

II. BDH PROGRAM CONCEPTION

1. BDH Program Conception Based On Study Results.

The conception and implementation of the BDH program are basically determined by 3 (three) main elements, namely the goals of the program, the characteristics of the beneficiaries, and the external interventions.

1.1. The goals of the program i.e. the established local community welfare and the sustained forestry resources could only be realized through continuous and sustainable integration of four development components i.e. economy, settlement, health and education, which repectively are to be environment oriented; and the inter-sector integration within each component, each of which is to be logically, systematically, and purposefully developed on the self-reliance capacity of the target beneficiaries concerned.

To effectively and efficienty realize the goals of the program, coordination of functions, cooperation and teamwork of all parties influenced by, and involved in the BDH program, most particularly in the provision of inputs, the conversion of them into outputs and subsequently into purposes and the stipulated goals should be established.

Continuous and sustainable inter-party coordination, cooperation and teamwork could not be institutionalized unless all parties have proper command of knowledge of, and skills in applying, policies, approaches, strategies; organization, administration, management; support delivery, and dissemination systems of BDH including their respectively proper instruments such as logical framework and network analyses; management information, and incentive and disincentive systems, all of which are to be incorporated in the BDH regulations. Without proper command of those aspects, commitment and consistency of all parties involved in, and influenced by the BDH program, the realization of the program's goals is unlikely to be accomplished within a relatively short timeframe.

1.2. In accordance with the existing BDH regulations, the target beneficiaries of the program consist of three different major groups each having their own characteristics including technological, economic, sosial, political, organizational and managerial capacities and capabilities, aspirations and needs, the quality of each of which differs from place to place and time to time, as follows:

1.2.1. The intended beneficiaries, who are differentiated by their domiciles i.e. communities living within, along the boundaries of, and around, the forest areas of the forest concession rights holders.

1.2.2. The desired beneficiaries, who are differentiated by their respective tasks and function in the BDH program i.e.:

a. The echelons of the Ministry of Forestry who are designated guidance makers, evaluation and control, monitoring and supervision, officers.

b. The echelons of the Forest Concession Rights Enterprises designated policy /decision makers, implementation programmers, and field operation officers.

1.2.3. The potential beneficiaries, who are differentiated by their respective positions in supporting and dissemination of BDH program i,e:

a. The echelons of the local Governments, designated inter-project coordinators and vertical disseminators of BDH activities and benefits to non-BDH areas as means of preventing new shifting cultvators and illegal forest product collectors.

b. Non-BDH target communities, spontaneously willing to adopt BDH initiated activities for their own benefit.

Though the program's aspects stated in points II.1.1 and II.1.2 are not changeable but the process of introduction, implementation and institutionalization of them to each level of the target beneficiary groups should be flexible and dynamic.

1.3. No development program or project is entirely independent of other programs or projects and neither free from Government policy changes nor external demands and pressures. So does the BDH. The capability of the BDH managers to anticipate those aspects and subsequently design and implement inward corrective measures and/ or propose outward improvement to soften and eventually eliminate the negative effects and impacts of the interventions on the BDH performance should be developed and established.

2. BDH Program Conception On Based The Existing BDH Regulations.

The BDH program conception based on the study methodology and program elements stated in point II.1 contains broader development components and agents, and more in - depth elements and aspects than that stated in the existing BDH regulations.

The rather incomplete directives for designing long term, five year, and annual BDH development plans and their respective outline, detail, site, operation plans; the incomplete directives for designing and implementing diagnostic study to acquire valid informations needed in designing those plans; the incomplete directives for the conversion of inputs into stipulated outputs, subsequently the conversion of outputs into stipulated purposes; for the operation, maintenance, development and dissemination of each of them to realize the program's goals; the absence of instruments for project development progress monitoring and various types of evaluations which simultaneously serve as strong bases for continuously and sustainably consistent coordination, cooperation and teamwork between parties influenced by and involved in, BDH activities cause problems on the part of BDH performers.

Instructions and demands from higher echelons without proper support for project operation undertaken by lower echelons create frustations, when added by threats which are far beyond the receiver's antagonistic power, worsened into apathy, or at the best, articificial behaviour.

III. FINDINGS FROM PILOT TRAINING COURSE AND FIELD OBSERVATION VISITS OF BDH PROJECTS IN WEST AND CENTRAL KALIMANTAN PROVINCES, AND ANALYSIS RESULTS.

1. Pilot Training Course.

The pilot training course was carried out in Pontianak for 7 days, attended by 23 BDH implementation programmers/managers; evaluation, control, monitoring and suporvision officers; forestry development researcher/ observer and diagnostic study performer, rural development coordinator and INPRES underdeveloped village planner.

1.1. The pre-test designed to measure the knowledge of the trainees related to BDH shows that their knowledge of the BDH's goals, purposes, and target beneficiaries stated in the Forestry Ministrial Decree is about 52.50%; of the approaches and strategies about 27.55%; of the organization, administration and management system about 46.55%; of the support delivery system about 24.75%, and of the BDH dissemination system about 12.35%. These figures show that on the one hand the BDH management information system is weak, on the other hand the monitoring and evaluation systems necessitated in designing and timely

application of corrective measures are almost non-existence.

1.2. The post-test shows that the knowledge of the trainees of the BDH components, elements and aspects necessitated for the realization of the stipulated goals increases by 126.90%. This figure indicates that the trainees are enthusiastic officials, highly motivated to learn things directly related to the successful performance of BDH, and eager to share their experience either good or bad for the good of BDH. The attendance rate of more than 98% also indicates the same qualities of the trainees.

2. **Field Observation Visits.**

The results of the field observation visits of 16 BDH projects, each run for almost 2.5 years in West and Central Kalimantan Provinces reveal that the degree of knowledge of those involved in the BDH program correlates positively with the BDH performance at the field level.

2.1. About 80% of the planned activities are realized at the field level. About 50% of the outputs are still functioning or could be seen. The effectivenes of the existing outputs is about 40%.

2.2. Nature, kind, form, number and quality of BDH activities are highly dependent on the good will of the Forest Concession Right holders which differs from place to place and changes from time to time. The absence of a standardized amount of fund set aside for BDH activities (such as Forest Product Contribution/IHH) weakens the concession holders commitment to BDH. The degree of commitment and consistency of the concession holders definitely relate to the location of the enterprise's headquarters, the number and distribution of local personnel engaged at every level of the enterprise's management organization structures, the real performers of the production activity, and the length of the concession time frame.

2.3. The participation rate of the intended beneficiaries at every BDH management stages is very slight. The type of participation employed at the BDH planning stage is mostly manipulative, at the implementation stage is basically based on charity approach, at the operation and maintenance stages is principally based on continuous subsidy. These types of participation create almost total dependency of the beneficiaries on external power,in contradiction with the self-reliance quality stipulated by the Ministrial Decree.

2.4. Diagnostic studies are meant to provide valid informations for the formulation of development plans. The BDH program distinguishes three different plans i.e the long term, five year, and annual. Each comprises the outline, detail,

site and operation plans. Each type and element of the plan has its own nature, scope, weight, in-depthness, timing, and duration of activities. Hence, valid informations provided by diagnostic studies should properly relevant to the above stated qualities. The BDH diagnostic study now still in process undertaken by about 51% of the total number of Forest Concession Rights holders is only meant to provide valid information for the long-term BDH development plan but none of the concession holders are in the process of formulating that type of plan.

2.5. Available BDH documents reveal that only the annual site plans are made which are only in form of pages stating planned annual activities and budgets. They are not preceeded by outline and detail plans serving as guidelines, neither followed by operation plans nor by implementation directives serving as references for field managers, trainers and extension workers in their efforts to convert available inputs into outputs.

Directives for outputs operation, maintenance development, diffusion and dissemination either horisontally or vertically, are not available.

Formative, performance, summative and impact evaluations which are bases for designing corrective measures while the project is on-going or necessitated after the project termination, are simply not done.

The consequence is that the projects become uneffective, unfficient and short-lived.

2.6. In the management process, the only instrument available is the Ministrial Decree on BDH which are followed by Decision Letters and Instructions of the Directorate Generals. Other necessary instruments such as hierarchy of objectives systematically explained by employing logical framework analysis, action diagrams precisely showing organization, administration, and management systems; project management information system, incentive and disincentive system, all of which are means of establishing and sustaining coordination of functions, inter-agency cooperation and teamwork in pursuing management stages and process including required inputs, are not available.

Findings from the pilot training course and field observation visits prove that the acceptability and the applicability of the current BDH planning practices are very much to be desired and that the effectiveness, efficiency, the continuance and sustainability of the project outputs are low, viewed from the goals that are to be realized based on the self-reliance capacity of the target beneficiaries. Due to the shortcomings of the BDH, some important purposes of the program such as the gradual decline of the existing shifting cultivators and illegal forest products collectors, and the prevention of new ones could not be

realized. In certain cases, due to the weaknesses in the support delivery system, the aftermaths are highly counterproductive.

IV. CONCLUSION AND RECOMMENDATION

The study of Enhancing The Roles of Local Communities In The Development Of Forestry Resources produces conclusions and recommendations, hopefully well worth taking into consideration for improving the current BDH program.

1. Conclusion

The weaknesses of the diagnostic study, the results of which are to be used as formative inputs in pursuing the planning systems, the shortcomings in determining components and their interactive effects on the environmental elements and their respective functions; the vagueness of the hierarchy of objectives indicating criteria and standard of achievement; the incomplete approaches and strategies to realize the stipulated objectives; the piece-meal directives for establishing organization, administration and management systems necessitated for the application of approaches and strategies; the weaknesses of the support delivery system which is the real basis of dissemination of technologies, field techniques and benefits both horisontally and vertically; the absence of supporting instruments such as logical framework and network analysis, management information, and incentive and desincentives systems which are essential tools for maintaining and sustaining inter-party coordinating, cooperation and teamwork in proper and timely provision of inputs including human resources manning every level of the management organizational structures, are aspects that trigger negative effects and impacts on BDH performance as follows:

a. BDH's field activities are disjointed and hence do not have any direct bearing on the BDH's purposes and goals as stipulated in the Forestry Ministerial Decree. They are mostly ineffective and inefficient.

b. BDH's intended beneficiaries become more and more dependent on external power which is in contradiction with one of the important purposes of BDH i.e. the established self-reliance capacity of the beneficiaries.

c. BDH's activities do not create capability for gradually reducing the number of shifting cultivators and illegal forest product collectors. On the contrary, due to the inappropriate support delivery practices the number of them increases rapidly.

d. BDH's activities have been going on for 2.5 years but corrective measures to improve policies, approaches, strategies, organization, administration, management, support deliver systems; field techniques and technologies, are not undertaken neither by the Forest Concession Right

holders nor by the officials of the Ministry of Forestry designated guidance makers, evaluators, controllers, monitoring officers and supervisors.

e. The amount of funds specifically set aside for activities directly related to BDH program depends entirely on the good will of the concession holders primarily due to the absence of any formally agreed upon decision on that (cf. Forest Product Contribution/Iuran Hasil Hutan)

2. Recommendation

Taking the above weaknesses and their directly negative effects and impacts as stated in the conclusion, the consultant team propose measures as follows :

FIRST

The Forestry Ministrial Decree No. 691/Kpts-II/1991 concerning The Roles Of The Forest Concession Rights Holders In The Development Of The Communities Within And Around Forest will be made complete with a Detail BDH Implementation Guideline clearly stating BDH components, approaches and strategies; organization, administration and management systems; extension and training system; support delivery sistem, and activity and benefit dissemination system.

SECOND

The institutionalization of knowledge of, and skill in applying knowledge as stated in the Detail BDH Implementation Guidline will be undertaken through action training. Sets of special training modules, each specifically dedicated to policy/decision makers/top management level, program implementation programmers /middle management level; and field managers including field trainers and extension workers serving as the actual support deliverers at the field level, within each of the BDH's desired and potential beneficiary groups will as soon as possible be formulated, produced and distributed.

Set of training moduls dedicated to each group of the BDH intended beneficiaries based on their respective domiciles will be formulated in cooperation and teamwork with field trainers and extension workers of the technical agencies at the local government level. The action training will be systematically undertaken, taking the current local real needs into consideration.

THIRD

The integration of intra - BDH project activities and the integration between BDH`s and other projects undertaken within

the local development regions; coordination of functions of intra-BDH`s management organizations, and coordination of functions between BDH`s and local development agencies` management organizations will be established, maintained and sustained. Integration and coordination will be primarily focused on the effective and efficient uses of available inputs, secondly on the continuance, sustainability and dissemination of BDH`s activities and benefits.

FOURTH

BDH`s project will be made an integral part of the local regional development programs. By using Regional Development Coordination Forums both at the kabupaten and provincial level the above purpose can be realized. These forums could stimultaneously be used as media to get external necessary inputs which are beyond BDH`s capabilities and capacities to provide.

FIFTH

Proper BDH`s support delivery and management information systems will as soon as possible be formulated, produced, distributed, and consistently applied.

SIXTH

Decisive agreement on the amount of fund for BDH development will urgently be reached to allow BDH programmers and field managers to precisely formulate long - term, five year and annual plans and their respective implementation.

V. ACKNOWLEDGEMENT

The result of the study of "ENHANCING THE ROLES OF LOCAL COMMUNITIES IN THE DEVELOPMENT OF FORESTRY RESOURCES" through the application of the BDH program as described above is optimum considerasing unavoidable constraints met with during the course of the study. The result is meant to be made one of the various inputs for the BDH improvement.

The consultant team humbly express their gratitude and appreciation for all supports, encouragement and facilities spontaneously rendered by all parties involved in the study, most particularly the Bureau of Planning, Directorate Generals, Forest Concession Rights Enterprises, USAID; Regional Offices of the Ministry of Forestry; Provincial Forestry Agencies, Development Planning Boards of West and Central Kalimantan Goverments; the Tanjungpura University, and local informal leaders who are directly and indirectly involved in the BDH activities.

THE STUDY OF ENHANCING THE ROLES OF LOCAL COMMUNITIES IN THE DEVELOPMENT OF FORESTRY RESOURCES.

THE NATURAL RESOURCES MANAGEMENT PROJECT.

(THE NRM PROJECT).

CHAPTER I.

THE STUDY BACKGROUND.

The total forest land area in Indonesia under the Natural Forest Land Use Plan/Tata Guna Hutan Kesepakatan amounts to approximately 143 million hectares, out of which about 109 million hectares, which is the present forest covered area, is considered to be an effective forest cover.

The forest area under logging concessions amount to approximately 60 million hectares but the actual production forest within concessions is about 43.3 million hectares. Conversion to other uses and allocations for economic development, such as plantations, leave about 36.8 million hectares.

The threat of reduction of area covered by forests due to population growth with its inevitably ever developing economic, social and cultural needs is becoming more and more severe, difficult, and costly to overcome unless appropriate and timely preventive measures are taken. Clearance for agriculture is not the sole cause of forest land reduction. Other factors such as settlements, mining, shifting cultivation, illegal logging and forest products harvesting, clearance for expansion of existing and development of new urban development, and wild fires all play a part in the gradual decline of forest resources.

Various reports say that in 1982/1983 the total forest land area used for shifting cultivation amounts to approximately 9,3 million hectares undertaken by about 1.25 million households of indigeneous communities. It has recently been identified that the number of shifting cultivators has rapidly been increasing by approximately 2.16% annually. The number now is estimated to be 1.8 million households. This rapid increase is a direct effect of

the scarcity of off-farm job opportunities which is unable to absorb new indigeneous job seekers, and the increase of transmigrant families not having enough skills in, and capital for, agricultural activities on agriculturally unsuitable soil, both of whom eventually consider shifting cultivation and /or illegal logging and forest products harvesting the only sources for survival.

The rapidly increasing expansion of deteriorated forest resources is not only caused by the increasing number of shifting cultivators and illegal logging and forest products harvesters but also by the rapidly decreasing shifting cultivation time cycles as the aftermath of the changes of status of huge natural forest areas, previously claimed by indigeneous communities as their custom right property, into logging concessions. The returns from shifting cultivation and forest products harvesting are getting lower and lower, hence the local communities are socio-economically turning weaker. This condition has been taken advantage of by irresponsible individuals and/or groups of outsiders who tantalize those poor communities to get higher income by selling to them the products of more extensively illegal logging and forest harvesting activities.

Pessimists say that unless effective preventive measures are taken the natural forest area will the totally wiped out within the next 20 years since 1991. Realizing the grave danger, the Ministry of Forestry is pursuing effective policy targets in three general areas i.e. production, protection, and participation. The participation policy is to insure that considerations, views, opinions, ideas, expertise of all parties involved in, and influenced by, forestry development activities are incorporated into those three policy targets based on a conviction that the increasing pressures on forest resources can be effectively, efficiently, continually and sustainably overcome by effective, efficient, continuals and sustainable active participation of those parties involved in, and influenced by, forestry resources development.

One of the various ministrial participation policy implementation programs in the context of forestry resources development is HPH Bina Desa Hutan / Forest Village Development Run By Forest Concession Rights Holders, abbreviated BDH. The Forestry Ministrial Decree/ Decision Letter No. 691/Kpts-II/91 titled "The

Roles Of Forestry Concession Rights Holders In The Development Of Communities Living Within And Around Forest" states that the BDH program has twin goals namely the "Established Welfare of Communities" and the "Sustained Forest Resources".

The forest concession rights holders /enterprises, abbreviated HPH, are designated managers and responsibility bearers of the BDH implementation. The Long-term, the Five Year, and the Annual, BDH development plans are respectively to be an integral part on the Long-term, the Five Year, and the Annual Forest Exploitation Plans / Rencana Karya Pengusahaan Hutan. The Director General of Forest Utilization is designated decision maker of guidance for HPHs, the Director General of Reforestation and Land Rehabilitation is designated decision maker of BDH program implementation. Heads of the Regional Offices of the Forestry Department are designated officials for program evaluation and control, heads of the Provincial Forestry Agencies are designated officials for program monitoring and supervision at the field level.

Considering that :

1. The material and spiritual welfare of the local communities as BDH's intended target beneficiaries could only be realized by integrated and comprehensive BDH's development activities;

2. The integrated and comprehensive BDH's development activities will consist of many technical and non-technical components and aspects which are interlinked, supplementary and complementary one to the others, demanding long-term development timeframe, which is [redacted] short-term and eventually into annual timefr[redacted];

3. The characteristics of the [redacted]ded target beneficiaries will differ from place to place and time to time, such as patterns and locations of settlements, the capability and suitability of available natural resources they are able to use, their degree of technological, economic, social, organizational and managerial capacities;

4. The characteristics of the HPHs as responsibility bearers for BDH implementation will differ from place to place and

time for time, such as their respective commitment for and consistency in, pursuing BDH program implementation; their respective financial, technological, personnel, organizational and managerial capacities, needed in managing programs of high complexity;

5. Supports from external powers such as the Ministry of Forestry's, the local governments' technical and non-technical agencies' top, middle and lower management level, will differ from place to place and time to time;

6. External interventions may occur during the BDH implementation, particularly those having contradicting interests with, and exerting negative effects on planned, BDH's; and

7. Unavoidable changes will definitely occur in all elements mentioned above;

all physical and non-physical components, policies, approaches, strategies, field techniques and tactis, even types and level of technologies introduced and applied will differ from place to place and time from time.

The differences in those elements will influence and determine the BDH implementing organizational structures and management system including their degree of flexibility and dynamics. However, due to the clearly defined goals and purposes, the intended target beneficiaries, the implementation responsibility bearers, and the supporting agencies, of BDH as stated in the Forestry Ministrial Decree No. 691/Kpts-II/91, the components both physical and non-physical contributing to the realization of the twin goals, the active participation-oriented approaches and strategies to effectively and efficiently realize those components; the organization of activities and institutions, the administration, and management stages and processes to apply the stipulated approaches and strategies; the field techniques, tactics and technologies proper to be introduced at the field level; can be determined for the long-term BDH implementation.
What ought to be taken into account in designing short-term and annual BDH plans is the fact that the conditions of the environmental elements and aspects change from place to place and time from time, hence flexibility and dynamics in BDH

organization, administration, and managemet systems are crucial. The purpose of this study is the availability of valid and reliable information on the current status of BDH's performance, the problems experienced, the constraints that hamper the realization of BDH's purposes and goals, and finally the availability of technically feasible, financially justifiable, and socio-politically and culturally acceptable recommendations for the improvement of the BDH program. The recommendations are expected to effectively contribute to the designing of plans of high acceptability and applicability resulting in outputs of high continuity, sustainability, and dissemination capacities. In this study, the BDH projects' development within the last 2.5 years in West and Central Kalimantan is the object of in-depth and comprehensive observation activities. The selection of these two provinces is based on information that about 40% of the total active HPHs in whole Indonesia, three HPHs whose BDH projects are reported to be most successful, and two research projects related to BDH's activities which are technically and financially sponsored by the USAID and Germany, operate there.

CHAPTER II

THE STUDY METHODOLOGY

Consistently referring to the Forestry Ministrial Decree No. 691/Kpts-II/91, most particularly the BDH's goals and purposes; the Decision and Circular Letters of the Director General of Forest Utilization, particularly those related to the management stages and processes of BDH; the characteristics of the intended, desired and potential BDH's beneficiaries which vary from place to place and time to time influenced by interventions originating from environmental elements and power; and the Terms Of Reference for the study received, the consultant team assigned by PT Ardes Perdana undertake activities arranged in the following order:

1. A study of available ex-ante and ex-poste reports on various programs and projects the success of which is determined by active participation of their respective intended target beneficiaries' participation in their management stages and

processes, complemented by direct field observation visits, among others: the upper watershed development projects in Java, INPRES Regreening and tree crop smallholder projects in Java and the outer islands. The focus of the study is the actual approaches, strategies; organization, administration, management, support delivery systems and instruments applied, and their effects on the realization of their respectively stipulated inputs, outputs, purposes and goals.

2. A study of reports on projects undertaken in various countries of Asia, Africa, and South/Latin America having purposes and goals similar to those of BDH.

3. Drawing comparisons between all aspects of those programs or projects described in points 1 and 2 and the consultant's empirical experiences from similar projects in Indonesia and overseas. The focus of the comparisons is the identification of strengths and weaknesses of the aspects and instruments applied, problems and constraints hampering the realization of the stipulated inputs, outputs, purposes and goals. Putting the current status including the strengths and weaknesses, problems and constraints, in a matrix for analysis.

4. The identification of strengths and weaknesses of the existing regulations for BDH/Peraturan Perundangan Di Bidang BDH by using field force analysis, and arrange them in an identical matrix as used in activity 3. The comparison of the two matrices shows the differences between the components, approaches, strategies; organization, administration, management, support delivery, dissemination, management information, incentive and disincentive, systems of the BDH and of the other projects.

   The result of the comparison is synthesized with the purposes and goals of BDH as precisely described in the Forestry Ministrial Decree No. 691/Kpts-II/91. The final result is an interim BDH program which discusses:

   4.1. Components that directly contribute to the realization of material and spiritual welfare of the intended target beneficiaries based on their continually and

sustainably developing self-reliance capacity. This type of welfare of the local communities substantially contribute to the sustainability of local forest resources.

The main components are as follows:

a. Rural economic sectors which are integratedly and environment-orientedly developed, serving as factors essential to the realization of sound and sustainable material welfare of the intended target beneficiaries as defined by the Forestry Ministrial Decree No. 691/Kpts-II/91.

b. Rural settlement sectors which are integratedly and environment-orientedly developed, serving as factors essential to the realization of sound and sustainable social welfare. The settlements are to be purposefully designed as an integral part of integrated local area and regional development efforts.

c. Health and nutrition sectors which are integratedly developed, serving as factors essential to the reduction of living cost, sustainable heightening of physical strength and fitness, sound ambition, intelligence, creativity and mobility of the intended target beneficiaries.

d. Education sectors which are closely relevant to the development of the three components stated above as factors essential to continual and sustainable positive changes of the intended target beneficiaries' absorptive capacity for new innovations, dissatisfaction of their own past performance, curiosity to learn something new, and capability to take well-calculated risks in new undertakings. Religious education plays an import part in the establishment of these capacities all of which are intended to be mentally, socially and politically sound.

4.2. General approaches and strategies appropriate for enhancing continuals and sustainable active participation of all BDH's target beneficiaries required in systematically arranged BDH management stages and processes, and essential to effective and efficient use of available inputs intended to produce optimal outputs which are significant for achieving higher level of BDH's objectives:

a. Conventional and basic needs approaches and their respective advantages and disadvantages in the establishment and institutionalization of continuous and sustainable active participation development, are explained.

b. Appropriate strategies in financing, activities operation, social technologies application, and in field techniques aimed at establishing self-reliance capacities on the part of BDH's target beneficiaries, serving as important aspects in insuring effective and efficient use of available inputs, continuity and sustainability of target beneficiaries' active participation in the operation, maintenance, development and dissemination of outputs, are concisely described.

4.3. Organization, administration and management systems thought appropriate as guidance for BDH program policy and decision makers, responsibility bearers, project managers, and field level activities implementing agents.

a. The organization of activities of, and the organization of institutions or personnel involved in and influenced by, BDH program purposefully directed toward inter-agency coordination, cooperation and teamwork establishment; prevention of replication and duplication of activities and fund; and the institutionalization of clearly defined tasks and functions distributed to each agency/party involved in the program, are explained.

b. A BDH administration system purposefully made simple and easy for every active participating party involved in the BDH program to apply, is concisely explained.

c. A BDH management system describing in detail management stages and processes to insure proper acceptability and applicability of plans; proper continuity, sustainability and dissemination capacities of BDH activities and benefits, is explained.

4.4. BDH's support delivery system meant to enable field implementation agents to select proper nature, kind, form, magnitude, timing, duration, receivers, and deliverers, of support to target beneficiaries which is essential for positive change in value systems, enhancing sense of responsibility and participation, all of which are strong bases for the establishment of self-reliance capacity on the part of target beneficiaries. Without self-reliance capacity, the realization of the stipulated BDH goals are unlikely. This system also heightens the effectiveness and efficiency of available inputs used.

4.5. BDH program extension system using training and visit methodology meant to create rural development cadres of high credibility, believability and trust originating from local intended target beneficiaries; to establish beneficiary group organizations which are financially, economicly, socially, managerially, technologically, and politically, strong.

The founding of this type of beneficiary group organizations is instrumental in horizontal dissemination of BDH's technologies, activities and benefits to the surrounding communities which are non-BDH target beneficiaries.

Successful BDH projects are to be made initial assets in the acceleration of integrated area and regional development efforts which in their turn will broaden BDH's access to needed inputs for further internal BDH development, simultaneously serve as

markets for BDH products both goods and services. To facilitate the realization of this purpose, the roles of local governments including their technical agencies in vertical dissemination, and the roles of beneficiary group organizations in horizontal dissemination, of BDH's activities and benefits are crucial. The establishment of welfare in the BDH's influence area will positively reduce the number of the existing shifting cultivators and illegal forest products harvesters, while that in the local development areas and regions will positively prevent new ones.

5. After the discussion of the interim BDH program by the policy and decision makers at the departmental level in Jakarta, the acceptability and applicability of the interim program are tested by BDH implementation programmers through a seven-day pilot training course in Pontianak, attended by BDH project field managers (17 HPH middle management level personnel representing 42 HPHs), BDH performance evaluators and controllers (2 officials of the Regional Office of the Ministry of Forestry), BDH performance supervisors (2 officials of the Provincial Forestry Agency), one official of Provincial Development Planning Board responsible for coordination and integration of rural development and the Underdeveloped Village Development, projects, and one representative of the University of Tanjungpura engaged in forestry development research and BDH's diagnostic study, in Kalimantan Barat Province.

   The pilot training course is also meant to collect information on actual BDH performance, current status, problems, constraints, and to discuss forwarded new ideas, aspirations, and proposals for the improvement of the interim BDH program plan.

   5.1. A pre-test to measure the degree of knowledge and empirical experience of the training participants concerning aspects of BDH, shows that their knowledge about the goals and target beneficiaries which are clearly stated in the Ministrial Decree is at the average of 52.50%, revealing that the BDH management information system is not satisfactory; their knowledge about organization, administration and management system is 46.50%; about approaches and strategies is

27.55%; about support delivery system is 24.75%; about dissemination system is 12.35%. The aftermath of this rather low degree of knowledge is clearly reflected in the BDH annual development plans of 3 successive years. The planned activities are not interlinked, do not have clear direction nor hierarchy of objectives, and consequently are of low acceptability and applicability.

5.2. A post-test undertaken after a seven-day course shows that the participants' knowledge has increased by the average of 126.90%, ranging from 95% to 146% for each BDH development aspect. The figures reflect the participant's eagerness and thirst for the improvement of their practical knowledge and performances to meet their respectively assigned tasks, functions, and responsibilities. Their attendance of 98% also indicates that their sense of duty and responsibility is basically strong.

6. To measure the correlation between the degree of knowledge and experience of the middle management level of the BDH program as shown in the pre-test and the actual performance of the BDH at the field level, the consultant team, using a pre-designed check-list, undertake field observation visits to 10 BDH projects in Central, and 6 projects in West Kalimantan, all of which have been successively developed for more than 2.5 years. The results of discussions and interviews with local officials both governmental and HPH's, managers of the USAID and Germany sponsored research and training projects, and some BDH project participating local individuals, are compared with, and incorporated into, the results of the observation visits.

The results of the visits, which positively correlate with the degree of knowledge of the middle management level the BDH program as shown by the pre-test, are as follows:

6.1. Less than 80% of the total number of the annual BDH activities planned, are actually undertaken. Not more than 50% of the outputs of the activities are functioning or could be physically seen. The effectiveness of the outputs is about 40%.

6.2. The kind, number, and quality of BDH activities are highly dependent on the good will of the forest concession rights holders due to the absence of any decision that determines the volume of fund specifically set aside for BDH activities. By comparing the kind, number and quality of BDH activities with the year of concession right issuance, and the total forest area under concession, one can conclude that the degree of HPH's commitment to, and consistency in meeting, the prescribed forestry agreement are to a great extent determined by the domicily of the top management, the number and distribution of local people engaged in the management organizational level, the actual production performers, and the remaining concession time.

6.3. The degree of participation of the intended target beneficiaries are very low both in the management stages and the management processes. The type of participation applied in the planning stage is manipulation; in the implementation is mostly based on charity approach; in the operation and maintenance of outputs depends most entirely on the subsidy provided; none whatsoever in the development and dissemination of outputs. All these resulted in the institutionalized dependency of the target beneficiaries on outsiders, contradictory to the self-reliance capacity of the target groups, as stipulated in the Ministrial Decree.

6.4. The diagnostic study is meant to provide valid and reliable informations for the BDH long-term, five year, and annual planning activities. Each of them has respectively its own nature, scope, priority, weight, indepthness, and timeframe of activities, hence each requires specific informations that differ from those required by the others. The diagnostic study now being undertaken by, at the most, 51% of the total number active HPHs is meant to provide informations for the BDH long-term plan but the informations are not presented in time-series to identify trends of changes. To exactly determine what component has the highest development leverage, which group of the target beneficiaries should be prioritized, one is to apply

location quotient and shift analyses. Each plan comprises outline, detail, site, and operation plans, and for the implementation of the plan there needs to be an implementation directive. Each of these, requires specific informations which are not provided, hitherto.

6.5. Field observation visits and interviews reveal that not a single HPH has managed to produce a BDH long-term nor a five year, plan. The annual plan shown consists of a list of proposed activities and budgets, which is basically a site plan. This plan is not preceded neither by an outline nor by a detail plan both respectively serve as criteria, and not followed by an operation plan nor by an implementation directive both respectively serve as standards in pursuing the BDH's hierarchy of objectives.

Directives for the operation, maintenance, development and dissemination of project's outputs are not available.
Formative performance, summative and impact evaluations which are the bases for determining and applying corrective measures in the course of project management stages and processes including the personnel manning the organizations, are not done.

6.6. The only instrument available and used as reference in the present BDH management process is the regulations for the BDH/Peraturan Perundangan Di Bidang HPH Bina Desa Hutan. Other instruments such as logical framework depicting hierarchy of objectives, network analysis or action diagrams, management information, and incentive and disincentive, systems which are crucial instruments for generating, maintaining and sustaining coordination of functions, cooperation and teamwork between parties involved in the BDH management stages and processes, including timely provision of inputs, are not available.

The findings from the pilot training course and field observation visits reveal that the acceptability and applicability of the present BDH plans are much to be desired, while the outputs of BDH activities are ineffective, inefficient, do not have self-

propelling and dissemination capacities. Due to these weaknesses, the BDH's field activities do not manage to reduce the number of the existing shifting cultivators and illegal forest product harvesters, originating from local communities and new arrivals, such as transmigrants. Often than not, these socio-economically unfortunate people are manipulated by greedy individuals and groups of people for their own benefit.

The dissatisfactory performance of BDH within the last 2.5 years is a direct effect of the incomplete directive for formulating long-term, five year, and annual BDH action plans, each of which comprises outline, detail, site and operation plans; incomplete directive for the implementation of diagnostic studies planned to provide valid and reliable informations necessitated by each of those plans; incomplete directive for the conversion of available inputs to result in optimum outputs, for the operation, maintenance and development of them, for the dissemination of BDH's activities and benefits both horizontally and vertically; incomplete directive for the establishment and sustainable linkages between BDH's activities and those undertaken by other institutions either serving as bases or follow-up of the former; incomplete provision of instruments needed in activity progress and development monitoring and evaluation, all of which simultaneously serve as bases for coordination, cooperation and teamwork between BDH's organization and institutions supportive, supplementary or complementary to the BDH.

The shortcomings in the formal directives create frustration to those who truly commit themselves to BDH, but very smartly used as excuses by those who do not. Frustration develops into artificial behaviour if there are too many instructions and demands beyond the antagonistic power to meet are added to it or worse into apathetic behaviour. This trend is easily identified and seen at the field level.

Other findings not less influential to the performance of the BDH are as follows:

a. The absence of a decision on the amount of fund for the BDH program causes the type, volume and quality of BDH's activities in the course of all BDH management stages and processes almost entirely dependent on the good will of the concession holders.

b. Systematic strengthening and broadening of knowledge and skills of BDH programmers, field executors, evaluators, controllers, and parties in charge of progress monitoring and supervision, is not done.

c. BDH development activities are not deliberately nor purposefully linked with those of the local and regional.

The entire findings from the pilot training course and the field observation visits are incorporated into the existing interim BDH program. The results is the draft final BDH program.

7. The draft final BDH program is presented and discussed in a workshop in Jakarta attended by the BDH policy and decision makers of the Ministry of Forestry and the Forest Concession Rights Holders; the representatives of the Research and Development, the Education and Training, Agencies of the Ministry of Forestry; the USAID, the Indonesian Timber Community, the International Timber Trade Organization, and the National Development Planning Board. The relevant suggestions from the workshop are incorporated into the draft final, resulting in the final BDH program which is fully described in CHAPTER III.

CHAPTER III.

HPH BINA DESA HUTAN PROGRAM.

PART I.

MAIN COMPONENTS.

The twin goals of the BDH program are the established welfare of the communities within and around the HPH work areas, and the sustained quality of forest resources.

The community welfare will be realized by the increase of income, the availability of job opportunities, the growth of environmentally based economy of the intended target beneficiaries and rural areas, properly supported by the

availability of required and relevant economic, social, governmental and security, infrastructures and facilities.

The enhancement of the quality of forest resources will be realized by the established comprehension and positive behaviour of the intended target beneficiaries and rural communities towards the sustainability of forest resources in order that the forest security can be voluntarily insured.

By the pursuit of those two approaches, the number of the existing shifting cultivators and illegal forest products harvesters can be put under control, gradually reduced and eventually totally eliminated, and simultaneously preventing possibilities that create new ones.
The goals, purposes an outputs stipulated in the Forestry Ministry Decree No. 691/Kpts-II/91 concerning the roles of the Forest Concession Rights Holders In The Development of Communities Within And Around Forest clearly show that the BDH program is an integrated rural development program although its intended target beneficiaries are limited to communities living within and around forest. Due its nature, integration of components, subcomponents, and activities of BDH is a must.

The components of the integrated BDH consist of an integrated rural economic development, integrated rural settlement development, integrated health development, and integrated education development, all of which are to be undertaken in the context of integrated local area and regional development. The inter-component and inter-activity integration could not be achieved unless the integration of development strategies, organizations, administration, management, support delivery and BDH's outputs dissemination techniques and tactics, are equally insured.

I. ECONOMIC DEVELOPMENT COMPONENT.

The development of the BDH's intended target beneficiaries' economy will be undertaken through effective and efficient utilization of available inputs to achieve continual and sustainable stability and increase of productivity.

The effective and efficient utilization of inputs will be insured by strong linkages between components, subcomponents,

and activities in order that each subcomponent logically contributes to the whole component, and each component does to the whole rural economy, development.

The subcomponents of the economic development component are as follows:

First : Integrated farming systems, including land rehabilitation and soil conservation.

Second : Rural manufacturing systems, including agricultural product processing and farm tools production.

Third : Markets.

The integrated farming systems are aimed to increase production of food stuff, industrial raw materials, animal feed, and livestock which simultaneously increase land capability, soil fertility, water yield and quality by practicing proper land rehabilitation and soil conservation techniques.
The integrated rural manufacturing systems are aimed to locally process agricultural products to gain value added, promote agro-based handicraft, rural and cooperative home-industries.
Markets represent all off-farm activities and resources (except land), include products sold or labour going off the farm as well as purchased inputs and household items.

Complementary activities supporting the three main economic development sub-components that the target beneficiaries ought to be able to do themselves are quality control, agricultural and industrial by-products processing.

The integration between farming and industry will happen after the agricultural products have been delivered to the processing industries to produce various products of higher values. One or more kind of agricultural products can serve as raw materials for one or more kind of processing industries. The industrial end products need packaging, transportation and marketing all of which need labour. New job and trade opportunities will multiply and open for non-farmers to utilize. However, proper care is to be taken that the industrial processing capacities should not exceed the volume of the agricultural products

specifically set aside for processing unless there is proven evidence that supply from neighbouring communities is available.

The rural processing industries should ideally be owned by, or under direct management of, the local communities through cooperative movement. Ownership by local communities will insure proper balance between the agricultural production capacity and the industries'. Ownership of processing industries by outsiders should, as far as possible, be avoided considering that tendencies toward monopoly, recruitment of labour from without the local communities using quality of skill and wages as excuses, will eventually emerge and create problems.

Joint ventures by local communities and outsiders may be advantageous if probabilities for better technology transfer, market expansion, broader and higher access to capital sources are available. Care should be taken that the total share value of the local communities should insure that the power for policy and decision making remains in the hand of the communities.

Different kinds and forms of inputs needed in the agricultural activities and processing industries will be partly provided by the intended target beneficiaries, the remaining by the BDH program and purchase in the market. After the establishment of those activities, the BDH may serve as intermediary between the local communities and the lending banks if opportunities for further development are open.

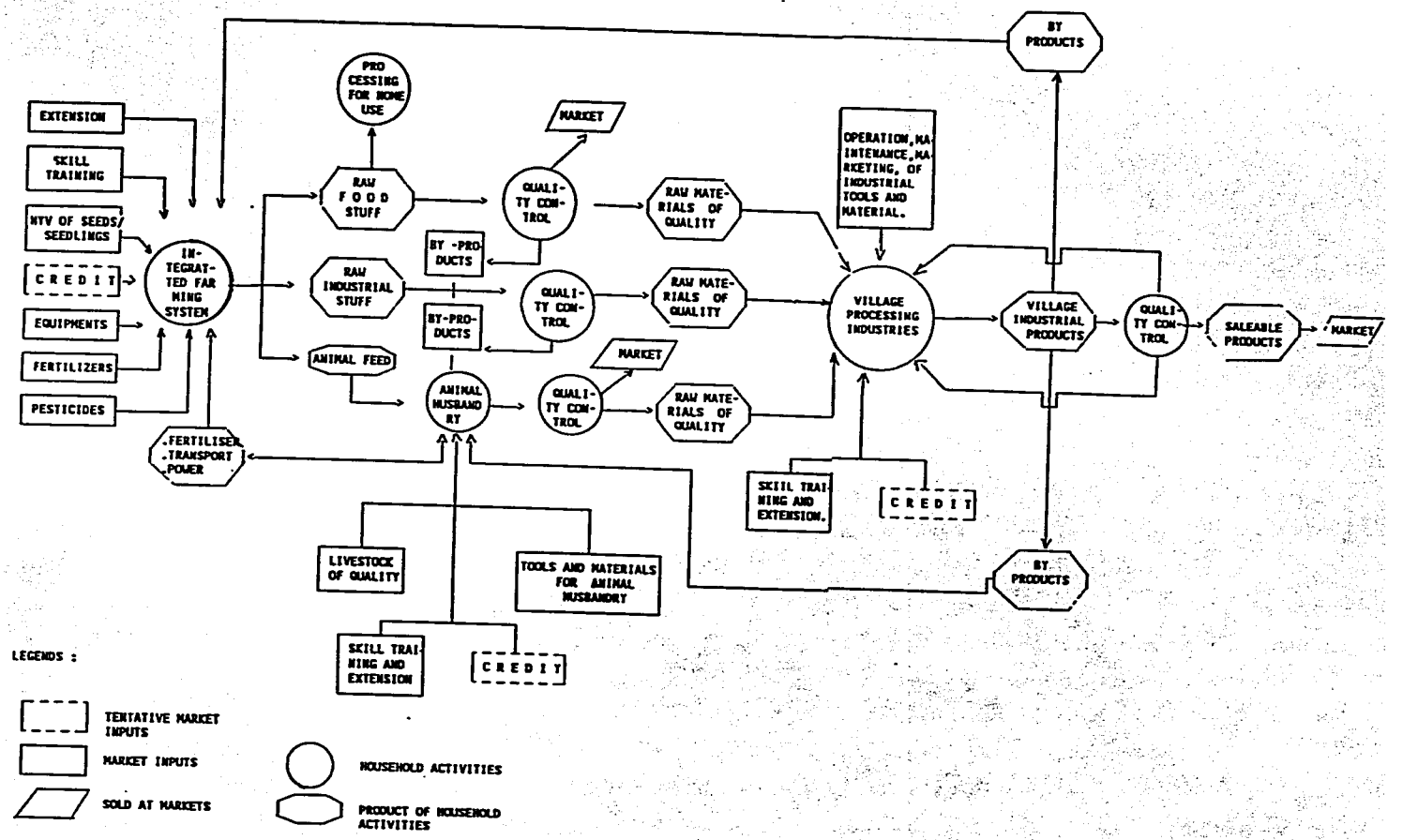
FIGURE I shown the linkages between agriculture, industry, and market and their activities.

1. INTEGRATED FARMING SYSTEMS.

A farming system is meant to increase agricultural productivity up to a point where a small number of target beneficiary farmers are able to produce enough food stuff for consumption of themselves and local non-farmer families, and other agricultural products for processing industries. It is also meant to provide job opportunities in various sectors that directly and indirectly support the agriculture production increase.

Activities related to agricultural production are distinguished into five groups as follows:

FIGURE I
AGRICULTURE-INDUSTRY - MARKET LINKAGES IN BDH PROGRAM



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First : Biological resources, comprising: Breeding, agronomy, production of cereals, vegetables, fruits, livestock, fish, tubers as food stuff, by-products and production-wastes processing for compost, green manure and energy.

Second : Land Resources, comprising:
The increase of upland and lowland fertility, and control of shifting cultivators and forest product harvesters.

Third : Environment and water resources:
Particularly for irrigation.

Fourth : Acceptability of inputs comprising:
Technology, processing of food, by-products, and fund.

Fifth : Post-harvest technology.

The higher the technical, organizational and management capabilities of the target beneficiaries supported by time-energy- and labour-saving agricultural equipment and tools, the higher the increase of their average income per land and time units. The higher the disposable income the higher the saving propensity and capacity which in its turn can be utilized as capital in the improvement of life or in the generation of new job opportunities.

Home industries that process agricultural products for household consumption and local small scale trading, village industries that process agricultural products for bigger scale trading, other village industries that produce agricultural equipments and tools, home appliances, building and construction materials, will help increase village productivity and job opportunities.

The increase of agricultural, home and village industry's productivity needs various supporting activities as follows:

First : The intended target beneficiaries are to be motivated to improve their productivity by various incentives.

Second : Skill training for utilizing more advance and productive technologies, is to be systematically undertaken.

Third : The strengthening of enterprise's management capabilities is to be undertaken.

Forth : Proper equipment and tools, and machinery that are easy to operate and maintain by local communities, are to be introduced.

The main incentive that directly influences the enhancement of the target beneficiary's economic motif to increase his labour's and capital's productivity is the net profit which is determined by the market mechanism, price structures, transportation and taxes systems, effective protection for the security of his assets (land, money, material, labour), and political stability.

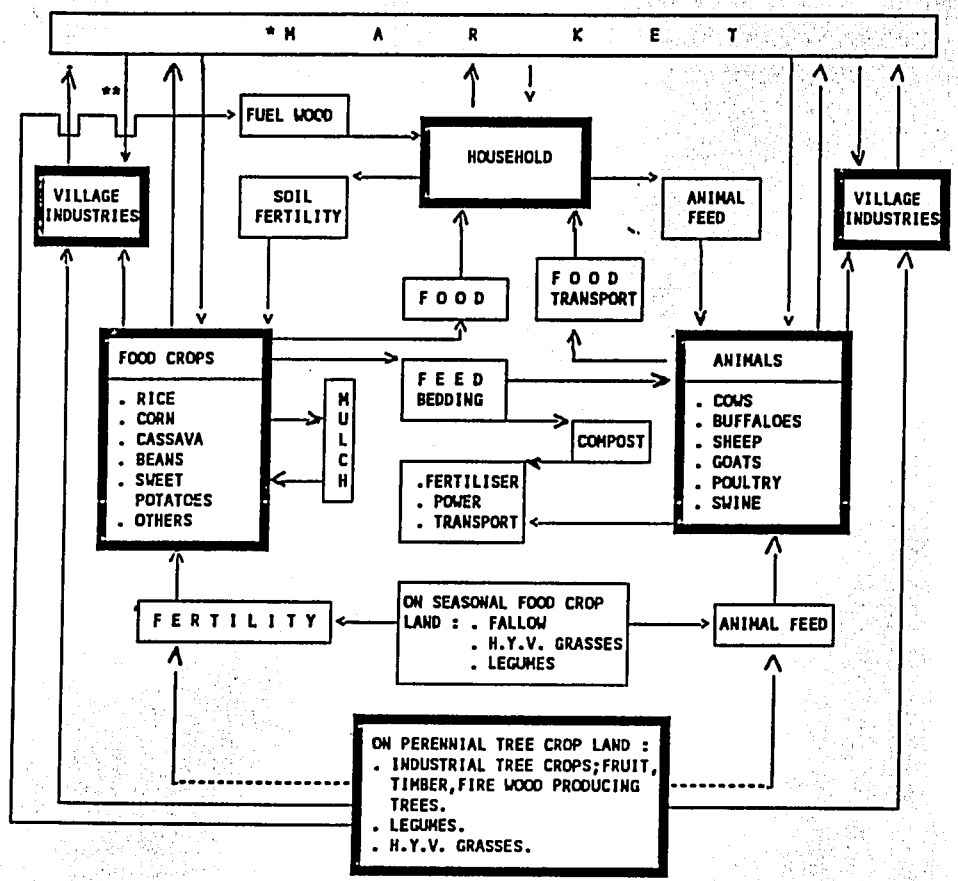
FIGURE II, III, IV and V show alternative integrated farming systems for various agroecosystems. Commodities such as food crops, perennial tree crops, and livestocks selected are to suit local agroecological capabilities and suitabilities, and local prices from time to time.

It is estimated that now each target beneficiary household will be able to operate only a hectare of agricultural land. In the initial years of the BDH, due to scant knowledge, skill and experience in farming, simple equipment and tools used, all time and energy of the household will be spent to undertake the five activities mentioned above.

By applying more advance and productive agricultural technologies, better equipment and tools and the usage of animal power, time and energy spent in the operation of one hectare of land will be reduced by almost 40%.

Idle time and labour tend to create negative impacts in subsistence agricultural areas. There are two ways to effectively and productively utilize available idle time and labour:

FIGURE II
HUMID UPLAND INTEGRATED FARMING SYSTEM



LEGEND:

* MARKET : ALL OFF-FARM ACTIVITIES AND RESOURCES (EXCEPT LAND) INCLUDING PRODUCTS SOLD, PURCHASED INPUTS AND HOUSEHOLD ITEMS, AND LABOUR GOING OFF THE FARM.

——>STRONG FLOW.

--->WEAK FLOW.

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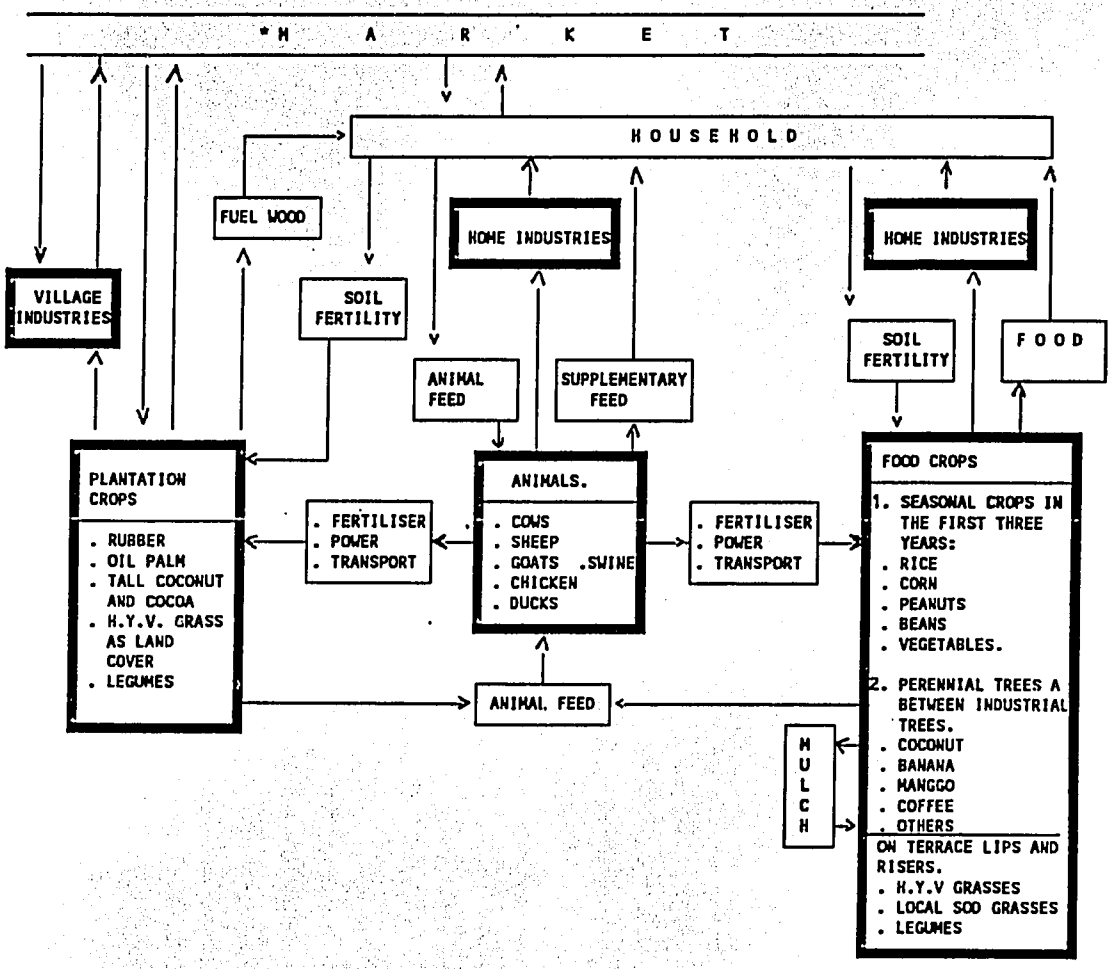
FIGURE III
INTEGRATED TREECROP SMALLHOLDER FARMING SYSTEM



LEGEND :

* MARKET = ALL OFF-FARM ACTIVITIES AND RESOURCES (EXCEPT LAND) INCLUDING PRODUCTS SOLD, PURCHASED INPUTS AND HOUSEHOLD ITEMS, AND LABOUR GOING OFF THE FARM.

——> STRONG FLOW.

---> WEAK FLOW.

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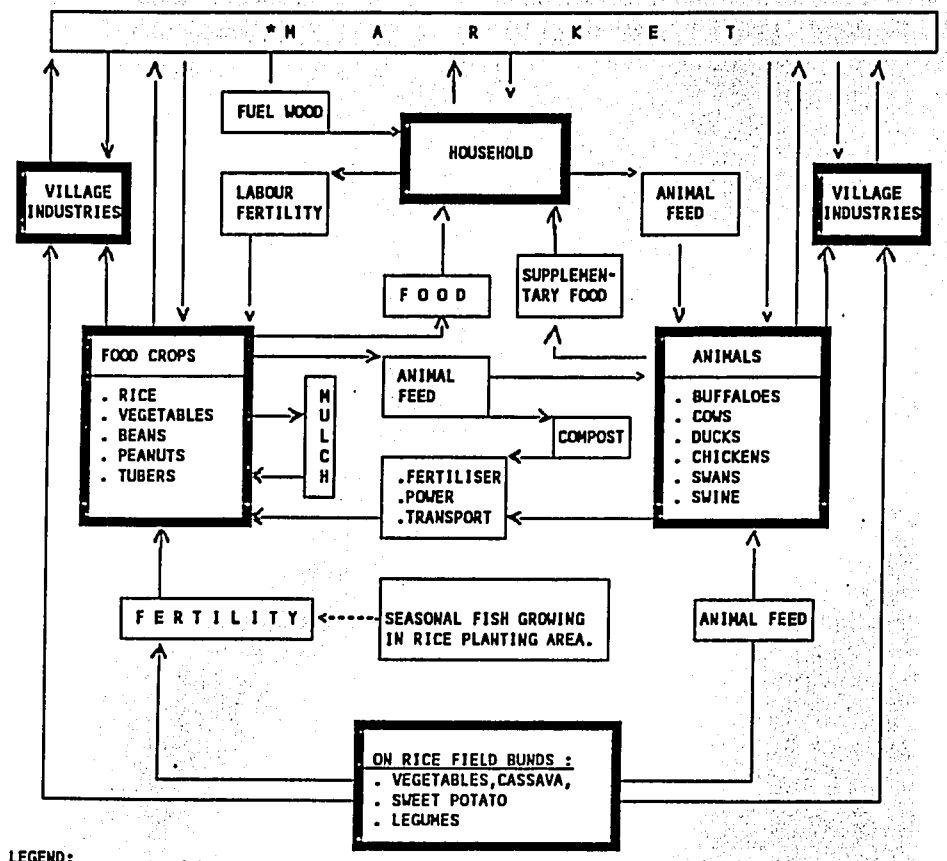
FIGURE IV
INTEGRATED LOWLAND / SAWAH FARMING SYSTEM



LEGEND:

* MARKET = ALL OFF-FARM ACTIVITIES AND RESOURCES (EXCEPT LAND) INCLUDING PRODUCTS SOLD, PURCHASED INPUTS AND HOUSEHOLD ITEMS, AND LABOUR GOING OFF THE FARM.

———> = STRONG FLOW

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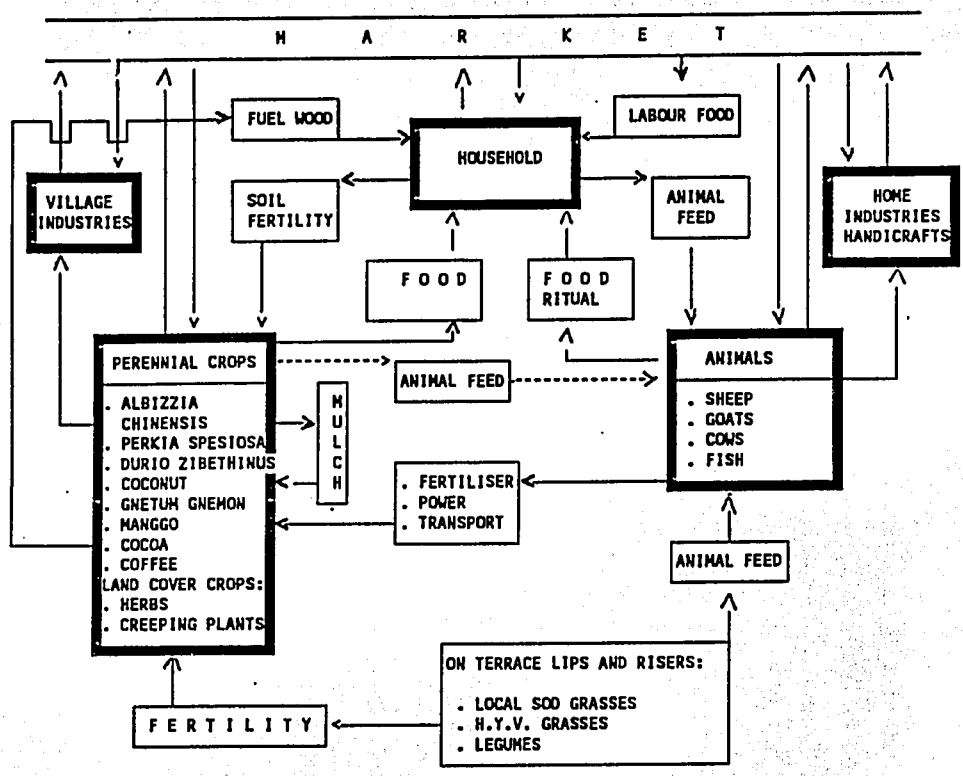
FIGURE V
MULTISTORY AGROFORESTRY



LEGEND :

* MARKET = ALL OFF-FARM ACTIVITIES AND RESOURCES (EXCEPT LAND) INCLUDING PRODUCTS SOLD, PURCHASED INPUTS AND HOUSEHOLD ITEMS, AND LABOUR GOING OFF THE FARM.

———> = STRONG FLOW

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First : By mutual consent, approximately 60% of the total number of farm households are selected to operate all agricultural land. The remaining 40% are to be engaged in off-farm jobs such as in cooperatively-owned village processing industries, transportation, marketing, agricultural equipment and tools maintenance and production, needed inputs supply, and other services required by households. This first option will run smoothly if all households actively participate in the decision making of whom of them are to bear responsibility for agricultural production activities, for running the industries, marketing, etc, in how many percent of the net profit gained is to be distributed to the participating members of the communities, and whom are to do monitoring and evaluation of activity progress and development.

Second Each of the farm households is to utilize a part of his agricultural land for the production of food stuff, livestock, fish, perennial trees producing timber for construction, fire wood and fruits. Idle time and labour are used for income generating off-farm jobs.

Whichever integrated farming system is selected by the target beneficiaries to be pursued, the establishment of the system could only be realized within 4 to 5 years. The time constraint is not a big problem to the BDH because the program is an integral part of the long-term and five year forest concession rights exploitation plans.

Seasonal and perennial food crops, timber and firewood producing trees, livestocks, legumes and variety of grasses selected for an integrated farming system should be those that naturally grow well or cultivated locally, well liked by the communities and have good and promising prospects. Introducing new commodities, the acceptability and productivity of which have not been field-tested, to local farmers who social-economically, technologically, organizationally and managerially weak, invites high risks. The most important aspect in an integrated farming system is the proper combination of plants, between plants and

livestock, between livestock and variety of grasses, between all those commodities and variety of legumes, and linkages between agricultural products and village processing industries, and linkages between these two economic subcomponents and the existing markets and prices.

If the BDH program determines that new plants and livestocks are crucial to the succes of any one of the farming systems, those commodities may best be first field-tested in a pilot training project which is 100% funded by the program, subsequently followed by model and demonstration projects during which the involvement of agricultural researchers, field extension workers and technical skill trainers, and the intended target beneficiary participation, are proportionally intensified. FIGURE VI shows the logical steps of those field research activities.

The advantages of the integrated farming systems on land privately-owned by, or under direct management of, the intended target beneficiaries are among others:

a. The farmer's income does not depend on one source/ commodity. The failure of one commodity can be compensated by the success of others.

b. The farmer's income is not seasonal but continual the whole year round because of differences in harvesting time of commodities.

c. Each farmer household will be able to process his own agricultural products due to their relatively small amount. The product processing generates value added.

d. Proper combination of plants and livestock prevents severe outbreak of diseases and pests, simultaneously increases plant and livestock productivity due to their interactive supplementary and complementary effects.

The reduction of operation and maintenance cost on the one hand and the increase of productivity and income as the positive effect of the application of integrated farming systems by the target beneficiaries, on the other hand, may greatly encourage non-BDH participating communities to adopt the same sedentary farming system.

FIGURE VI

FIELD RESEARCH ACTIVITY STAGES

COMPONENT	YEAR						
	I	II	III	IV	V	VI	VII
A	PILOT	MODEL	DEMONS-TRATION	GENERALI-ZATION	-	-	-
B	-	PILOT	MODEL	DEMONS-TRATION	GENERALI-ZATION	-	-
C	-	-	PILOT	MODEL	DEMONS-TRATION	GENERALI-ZATION	-
D	-	-	-	PILOT	MODEL	DEMONS-TRATION	GENERALI-ZATION.

The shifting cultivators and illegal forest products harvesters, as also the BDH participants, do have some kind of economic motif which should be made a basis for motivating them to adopt the program's messages. If they clearly see that by spending the same amount of labour, time, energy and fund as they do in shifting cultivation and illegal harvesting, they gain much higher production, higher income, less risks both physical and non-physical, by adopting BDH messages, they surely will follow BDH's lead.

Another aspect that they should clearly comprehend is that changes in legal forest land use, more intensive enforcement of laws related to the protection of forest resources due to political pressures from within and without the country, will cause their operation area scarcer and scarcer, their labour, time and fund spent to get the same amounts of production as they used to receive, will definitely increase from time to time. Without due and proper measures taken by the government both the government and those people will become bigger losers.

2. SETTLEMENTS.

Another important BDH's component is settlement development which should appropriately meet the present needs of the intended target beneficiaries, and simultaneously serve as basic capital to meet their future needs which will be definitely more complex than the present viewed from their functions and capacities for the realization of the stipulated socio-economic and socio-cultural conditions.

Based on the above concept, the rehabilitation of the existing, and development of future settlements of the intended target beneficiaries should take into consideration not only the physical / technical aspects but also economic, socio-cultural, health, environmental, and even socio-political aspects. Experts in construction, geography, sociology, economics, environment, psychology, health, education, spatial planning, are then needed.

2.1. Settlement Arrangement.

The existing settlements of the intended target beneficiaries are mostly developed following the local natural features and hence not well arranged.

Principally, the settlement arrangement can be differentiated into several patterns as follows:

2.1.1. Clustered pattern.

Houses and economic, social, administration infrastructures and facilities are developed in clusters on a relatively strategic site without any consideration of possible disasters or losses.

a. On mountainous or hilly areas.

   Land stability is disturbed. Physically or technically critical land, partial or total land slides, and cave-ins will emerge.

b. On low elevated flat land.

   Facilities, utilities, and environment sanitation structures can not be easily, effectively and efficiently provided. Danger of fires, epidemic diseases, etc, cannot be easily eliminated.

c. Along beaches or around lakes.

   The equilibrium of nature (beaches, lakes) can be disturbed and tends to become critical due to contamination. Slums could easily emerge.

d. In river basins.

   Settlements which are poorly developed along rivers tend to cause river water contamination, land slides, soil erosion, and narrowing of river bodies.

2.1.2. Scattered pattern.

It often happens on mountainous and hilly areas, on low elevated flat land, along beaches and rivers. It creates difficult provision of public facilities and utilities.

2.1.3. Linear pattern:

a. Along rivers.

Utilization of rivers as places for income generation, transportation, and other activities such as bathing, washing, etc, cause river water contamination. Uncontrolled usage of rivers tends to result in soil erosion and land slides.

b. Along beaches.

The environmental sustainability as factor in protection and stabilization of beaches tends to deteriorate. Habitats of various species of fish and shrimps can be disturbed that result in the decrease of their reproductive capacity.

c. On mountainous and hilly areas.

Lack of proper arrangement, the area around the settlements may deteriorate with or without malicious intents. The equilibrium of the ecosystem can be disturbed as a direct impact of the decrease of water infiltration capacity which in its turn causes disadvantageous maximum and minimum water discharges in rivers.

d. Linear, radial and ribbon patterns.

Harmonious interaction between families will be difficult to realize, public facilities and utilities will become less effective and efficient. Due to rapid changes in the future socio-economic, socio-cultural and socio-political development, these patterns intensify noise, air pollution, and cause disasters.

2.2. Old Settlement Rehabilitation And New-Settlement Development Patterns.

To create an integrated settlement, some general and specific prerequisites are to be met.

2.2.1. General prerequisites.

General prerequisites for arranging, controlling, developing and monitoring settlements, disregarding their patterns, are as follows:

a. The growth and development of settlements should be arranged in clusters to increase the effectiveness and efficiency of public infrastructures, facilities and utilities provided for all households.

b. Distances between houses should be enough to enhance:

b.1. Better acceptance of sunlight;
b.2. More perfect air circulation;
b.3. Better security from fires;
b.4. Rapid eradication of epidemic diseases;
b.5. Broader sights;
b.6. The improvement of housing environment by productive utilization of home yards;
b.7. The construction or placement of environmental facilities.

c. Distances between houses and roads should be enough to enhance:

c.1. Traffic safety and smoothness by avoiding disturbances and influences from household activities;
c.2. Avoidance of noise and polluted air;
c.3. Protection of members of communities, specifically children, from traffic hazards and dangers.

d. The sustainability of environment are to be rehabilitated, consolidated, maintained and developed by:

d.1. Regreening, which serves as protection from sun heat, strong wind, noise and polluted air, simultaneously creates environmental freshness;
d.1. Environment sanitation activities.

e. The availability of factors that support life, among others:

e.1. Clean water sources;
e.2. Job opportunities;
e.3. Communication and transport facilities;
e.4. Health and education infrastructures, facilities and manpower.

f. The settlements are to be situated in areas with good drainage to allow water flow smoothly without causing any soil erosion;

g. Buildings (houses, meeting places, offices) that are to be an integral part of settlement development, should be healthy and have ample holding capacity.

2.2.2. Specific prerequisites.

Specific prerequisites for arranging, controlling, developing and maintaining settlements related to their sites.

a. <u>On mountainous and hilly areas:</u>

a.1. The sites of settlements situated in highly sloping areas need measures to establish slope and land stability such as:

* The construction of slope/land stability reinforcing structures (made of wood, bamboo, stone, cement /concrete).
* Distances between houses and slope lips should be enough to avoid the effects of land slides;
* The construction and maintenance of waterways with drop structures for controlling surface run-off and household waste water;
* Planting perennial trees or shrubberies of high economic value whose roots stabilize soils.

a.2. In areas where land/soil movement is unstable, the sites of settlements should be far enough from

land slide tracks or locations where land slides have occurred;

a.3. The sites of settlements in valleys and foothills should be protected from whirlwind and backwind.

a.4. Physically /technically critical sites such as those situated in highly steep hills, in sandy soil areas, etc should not be used for settlement development.

b. <u>In river basins/watersheds.</u>

b.1. Avoid settlement development along or close to river bends. It is suggested that existing settlements move to inland safe sites.

b.2. Avoid construction of bath, washing and water closet rooms, houses and public facilities along or close to rivers. The buildings should be constructed more inland to avoid water pollution, land slides and soil erosion.

b.3. Perennial trees and shrubberies of high economic and sight value are to intensively and extensively planted to serve as buffer zone along river sides. The purposes are:

* Stabilized riverside land and soil by tree's and shrubbery's roots.
* Prevention of illegal settlements along river sides.
* Reduction of sun heat, contaminated air and wind.
* Improved sights and environmental freshness.

c. <u>Along beaches and lakes.</u>

The principles of settlement development arrangement and control situated along beaches and lakes are the same with those situated along river sides. Additional factors appropriate to be taken into consideration are among others:

c.1. The effect of sea wind breeze on buildings;

c.2. Metal and other material fatigues;

c.3. Coastal erosion/abrasion by waves.

The site of the house should be selected taking those three factors into consideration, e.g. the widest /longest walls are not to be in opposite position with the main wind direction or constructed without wind lanes/paths.

d. Along main roads.

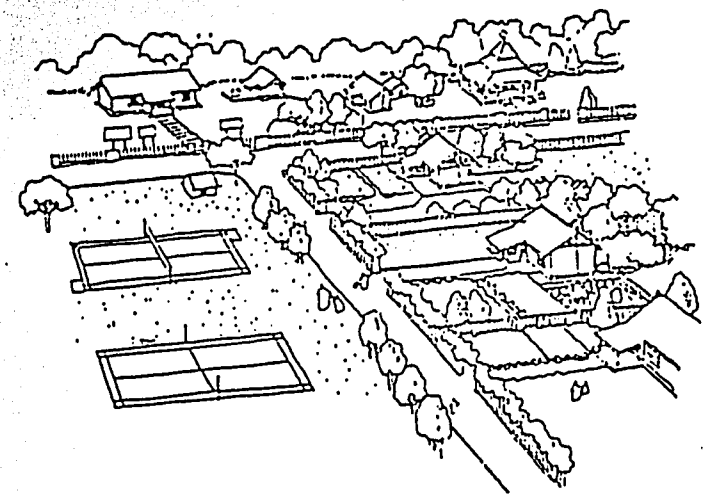
The principles of settlement development arrangement and control situated along main roads are the same with those situated along river sides. Additional factors to be taken into consideration are among others:

d.1. Settlement's activities do not disturb traffic safety and smoothness;

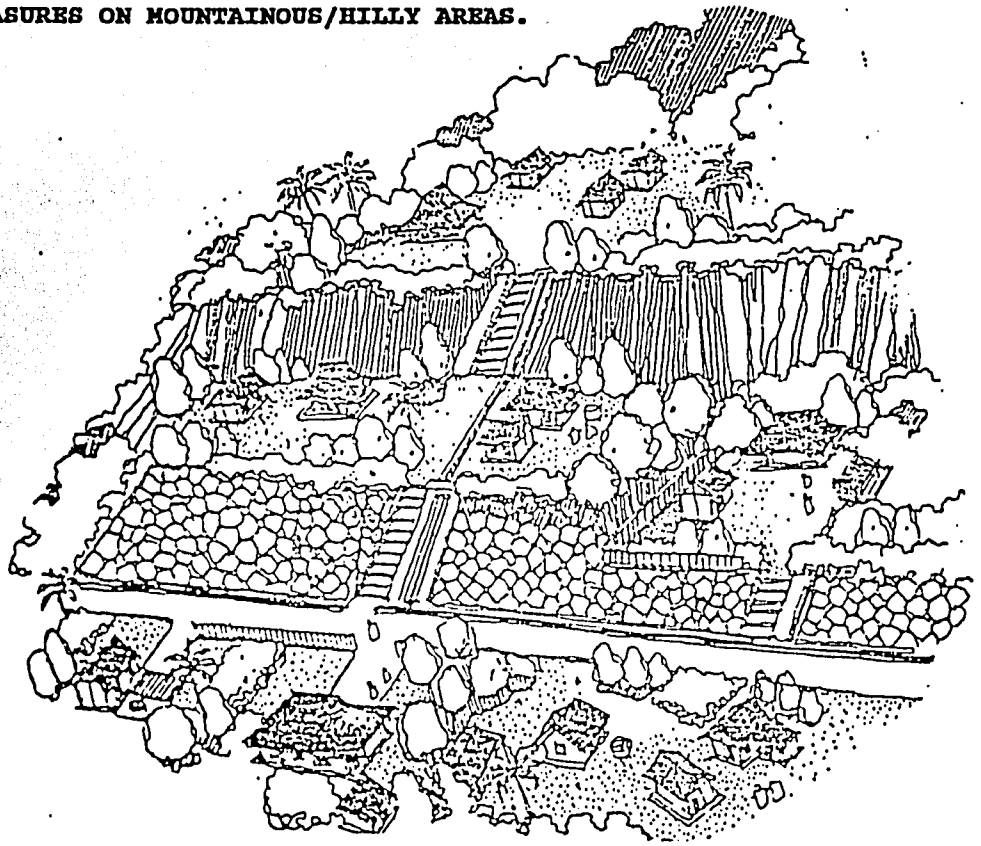
d.2. The needs for life comforts are well met such as quiet environment, unpolluted air, water;

d.3. Children are able to play and free from man-made hazards and dangers.

PICTURE OF AN EXAMPLE OF WELL ARRANGED AND PLANNED SETTLEMENT



PICTURE OF AN EXAMPLE OF SETTLEMENT WITH CONSTRUCTION OF SAFETY MEASURES ON MOUNTAINOUS/HILLY AREAS.



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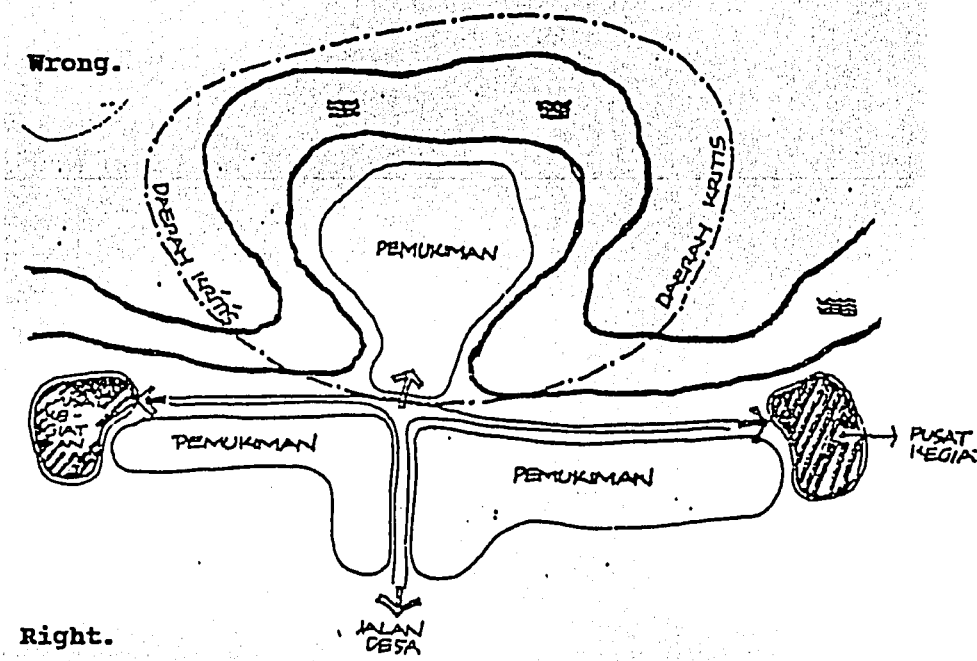
2.2.3. Spatial Arrangement and Settlement Development Problem Solution.

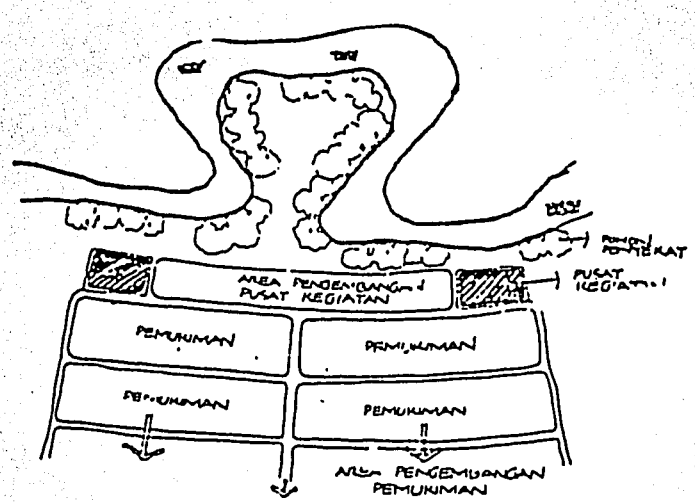
Pictures below show examples of spatial arrangement and settlement development problem solution (examples of right settlement arrangement have been shown on the preceding page).

a. Along River Sides.

Wrong.



Right.



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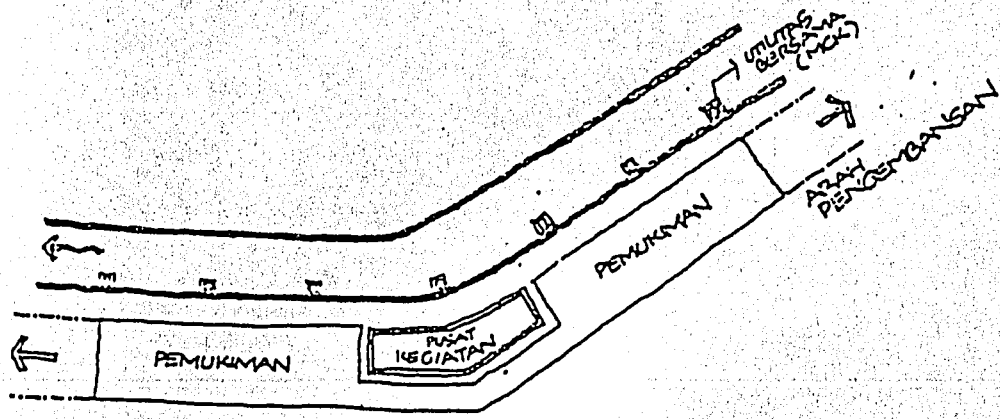
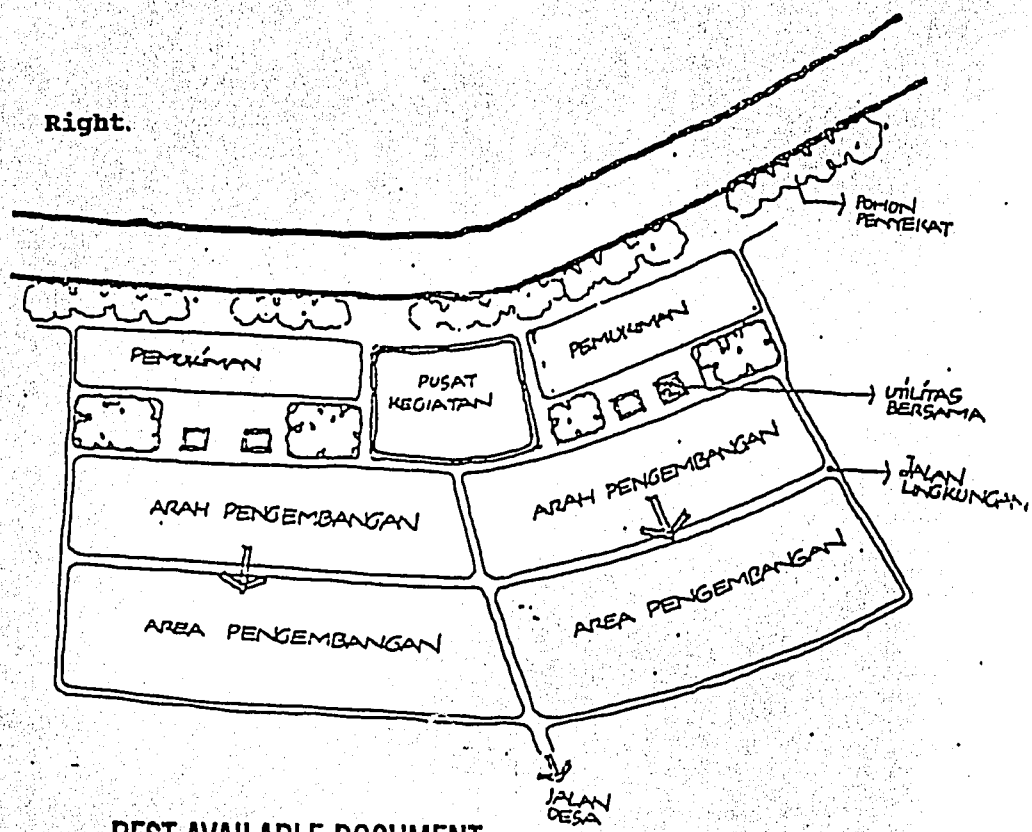
b. **In River Basins/Watersheds.**

Wrong.



Right.



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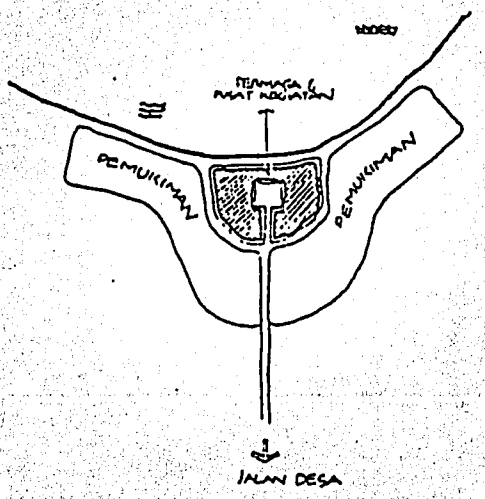
c. **Along Beaches/Lakes.**

Wrong.



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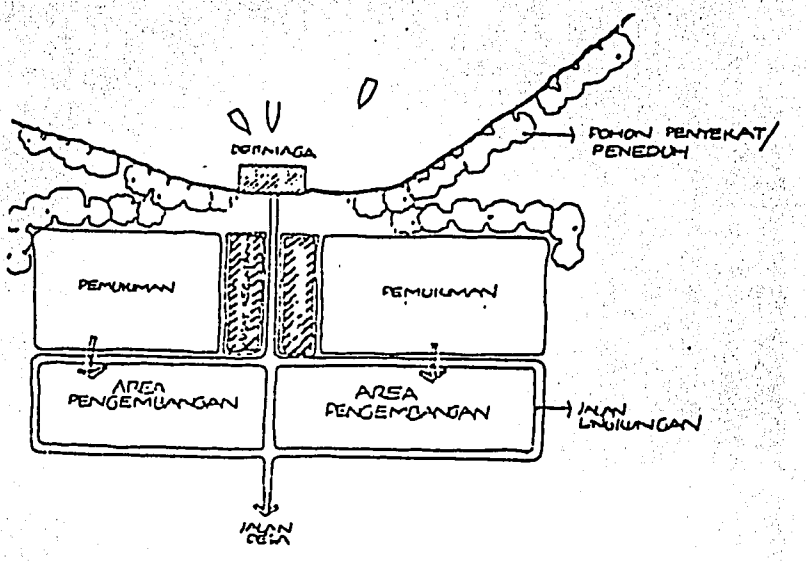

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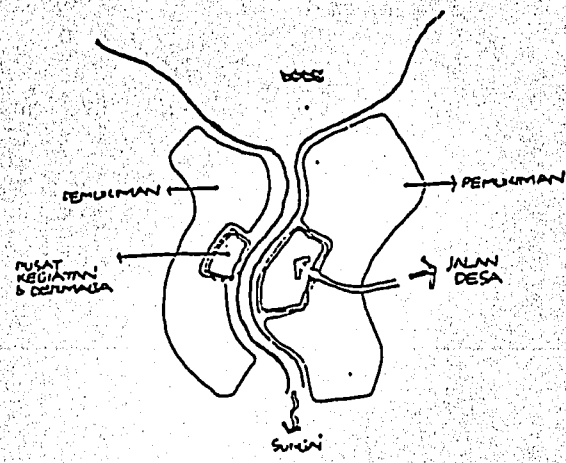
d. **At Estuaries.**

Wrong.



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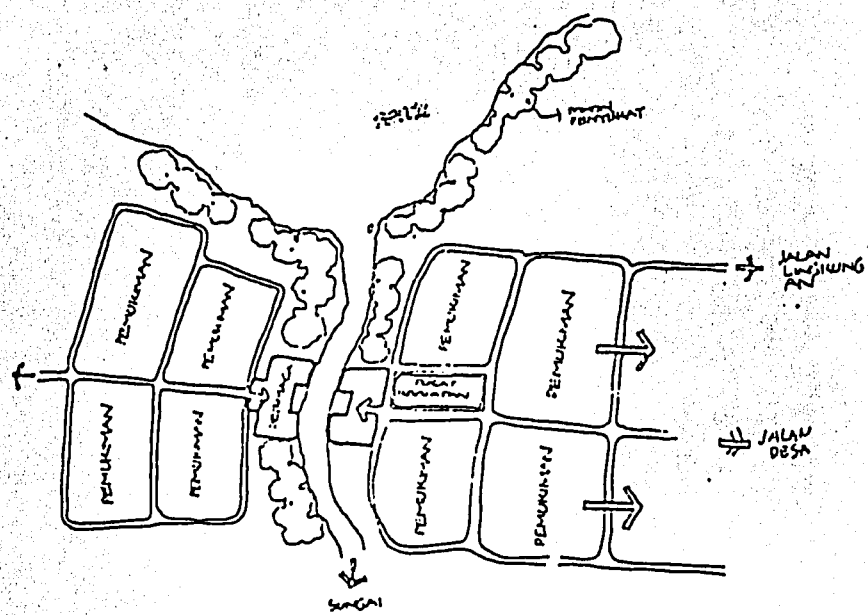

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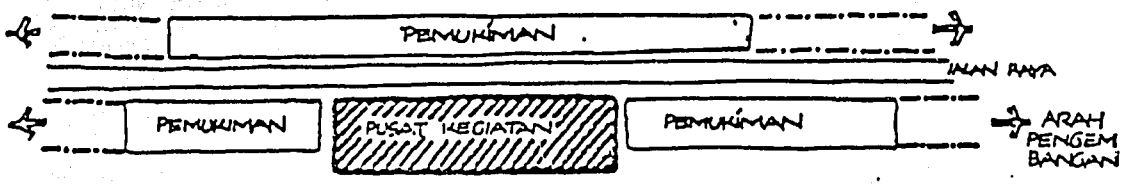
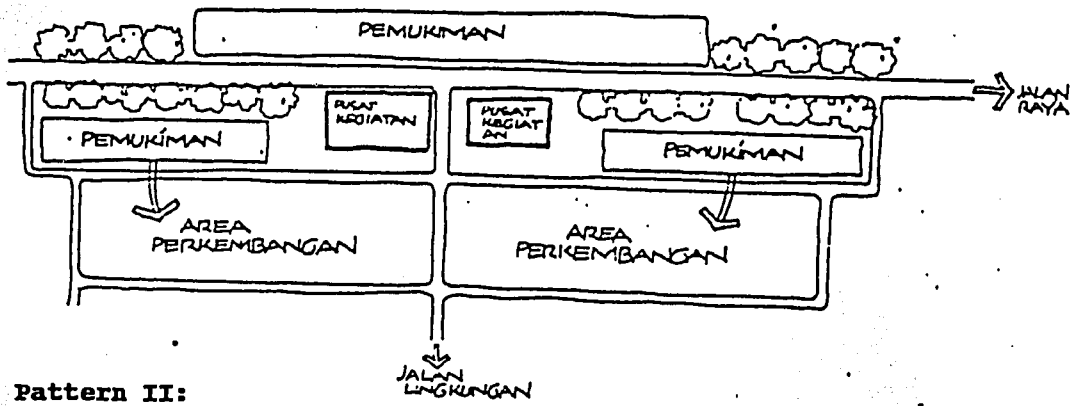
e. **Along Main Roads.**

Wrong.

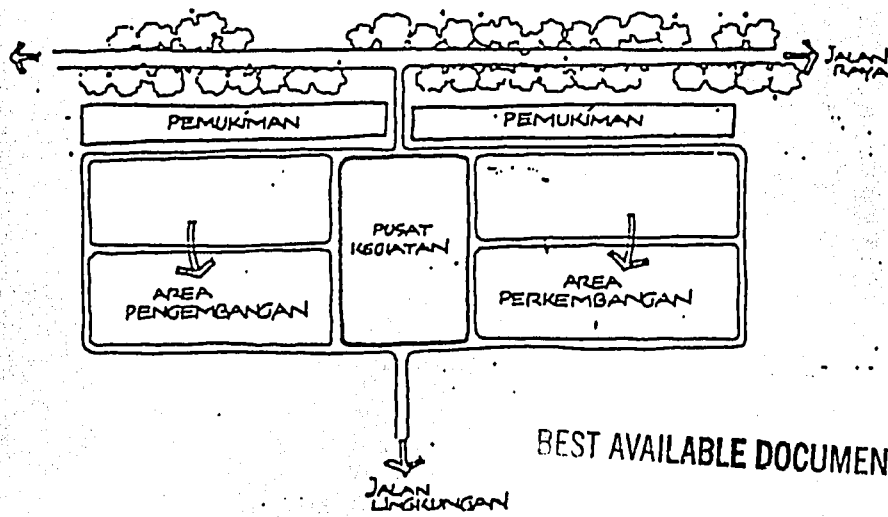


Right.

Pattern I:



Pattern II:



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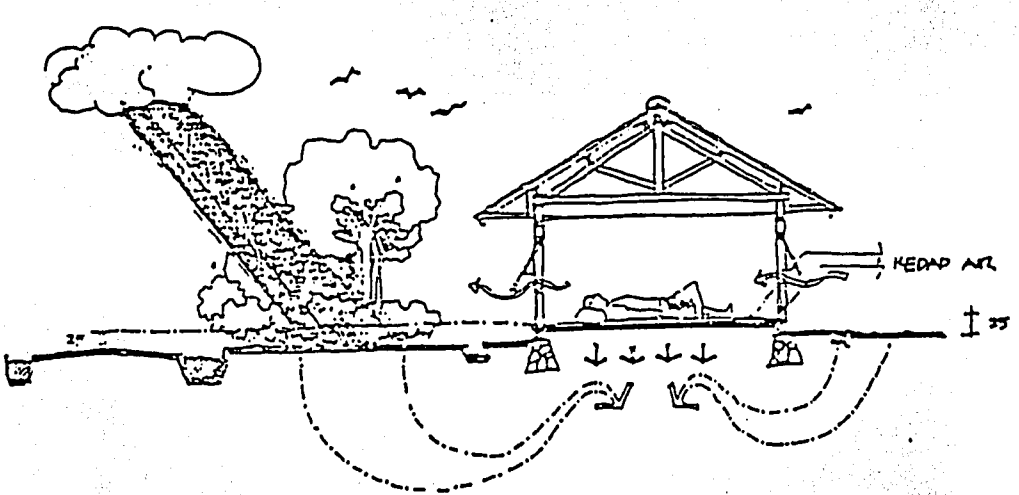
2.2.4. Simple Houses.

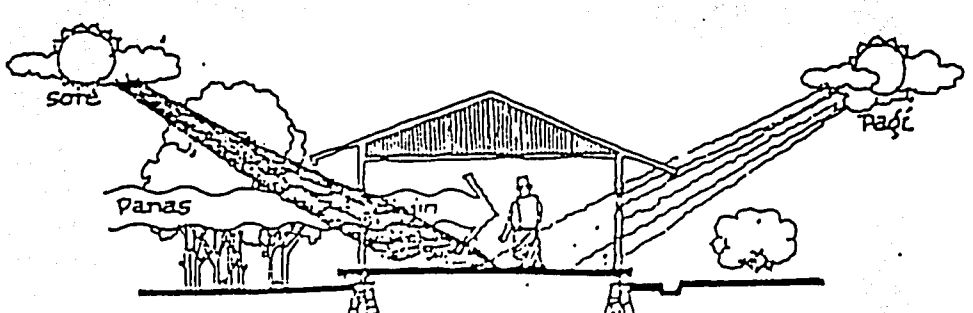
In the rehabilitation of old, and construction of new, houses, the house condition, spatial arrangement and sizes are to be taken into consideration. If the planned site has undulating soil, situated in a sunken area, swamp, or has very shallow groundwater, the site is to be first treated until it reaches mature condition and ready for settlement development. Houseses are to be healthy and provide comfort to the occupants. Housing components that are to be given attention to, are as follows:

a. Floor.



The floor should not be humid but waterproof. Its foundation should not be weak, loose and dusty soil.

b. Ventilation.



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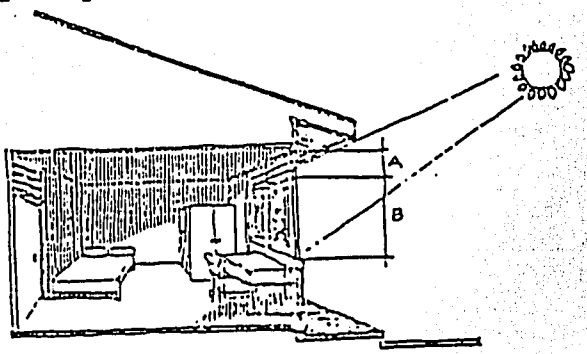
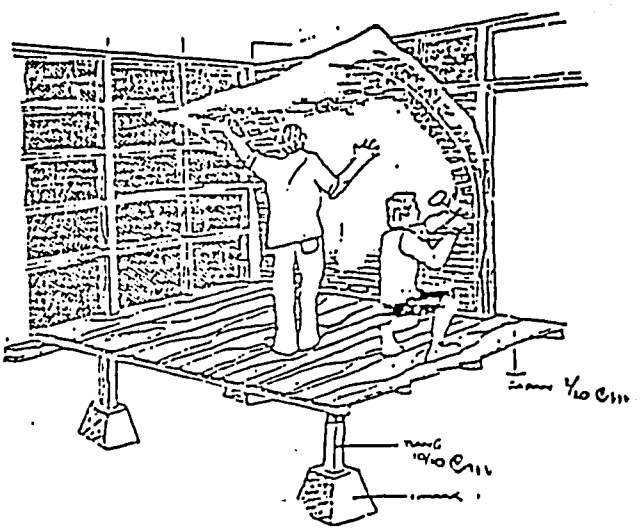
Poorly constructed ventilation causes fresh air circulation not run smoothy. Too small a window causes rooms in the house humid and stuffy. Ventilations not constructed in perfectly opposite positions make people feel dizzy and uncomfortable because exchange of air is minimum. Ventilations should be relatively wide and constructed in perfect opposite positions.

c. Light Opening.



Light opening is meant to allow sunray enter the house sufficiently. Besides, sunray can enter the house through glass tiles. Sufficient sunray that enters rooms kills or drives away diseases and insects, but it should not be more than two hours a day. Excessive sunray makes rooms hot.

d. Walls.



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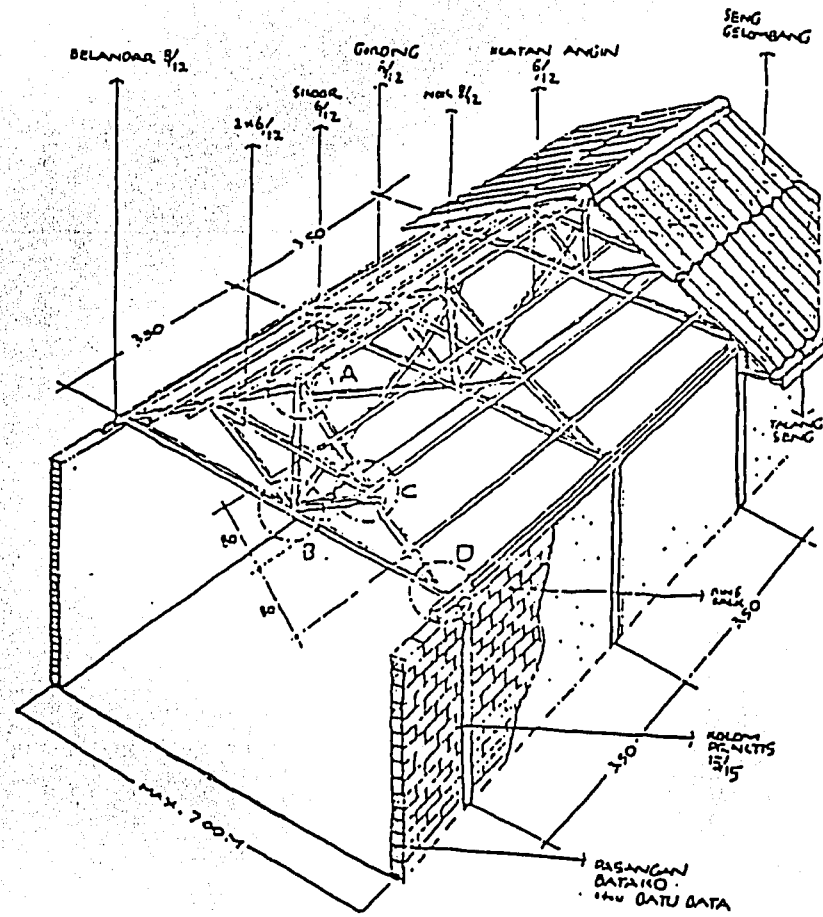
Walls of woven bamboo or bakung palm are not always unsatisfactory if the installation is well done. Walls of woven bamboo allow air or wind enter the rooms, but not sunlight. Proper mixture of material for the construction of wall foundation prevents the lower part of walls from becoming humid and covered by moss.
Partition walls between bed rooms, bathrooms, are to be constructed to maintain "privacy".

e. Roofs.



A roofs made of leaves is to be, as far as possible, avoided because beside it easily catch fire, very oftenly become hiding places of insects and other dangerous small animals. But roofs of leaves which are well arranged, cut evenly, and continuously maintained could be as good as those of corrugated iron or zinc. Simple rural houses with roofs of thick woven leaves are comfortably cool at day and warm at night time.

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f. **Water Sources.**

Clean water is a very important household need. Water wells serving as water sources are to be completely protected from pollution and contamination due to poorly arranged waste water disposal. Dirty water around well holes are to prevented from flowing and seeping into the wells. Well holes are to be covered by lids to prevent animals and insects from entering the wells.

g. **Garbage and Waste Disposal.**

Garbage disposal is to be regularly done and heaped up in specially made holes or containers. Heaps of garbage could profitably be made compost rather than burning them. Holes for collecting garbage and waste are to be at least 15 meter away from water sources.

h. **Construction.**

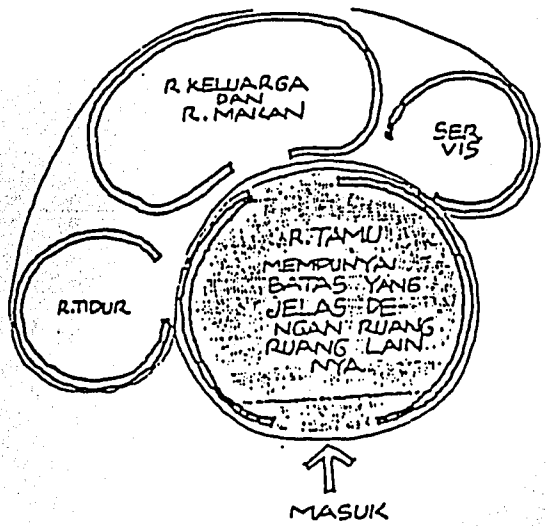
Rural houses are generally built without taking proper construction techniques into consideration. simple construction joint that is able only to stand satisfies rural communities. Walls are very rarely reinforced by good foundation. House construction techniques tends to be hereditary. Better construction techniques will be accepted and adopted if the local people see that they are beneficial and applicable, considering locally available materials.

i. **Sizes.**

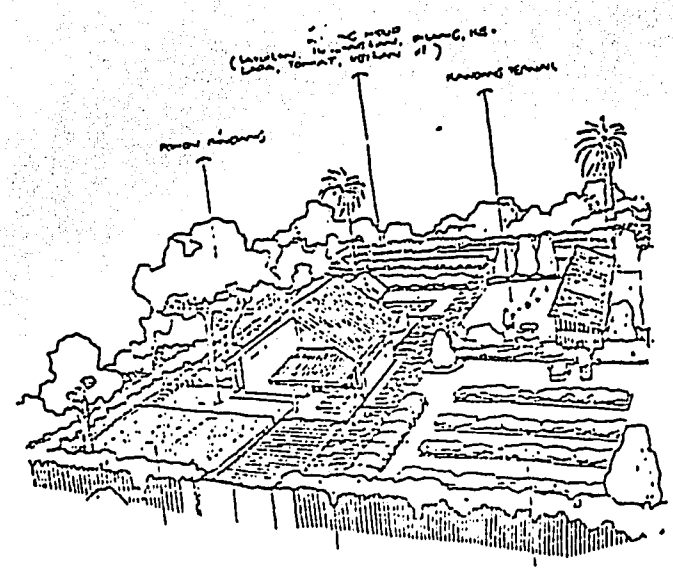
The comfort of a room is determined by the size of it. Too big a room makes people feel tired, and too small a room makes them feel squeezed. In rural areas where parties are usually attended by many people, one has to have a large room to cater the visitors. For practical reasons, room partitions are to be removable.

j. **Space Arrangement.**

Space arrangement may mean placement of home appliances which have often been introduced and trained by the family welfare program. It could also mean selection of rooms within the house that should be close to, and interconnected with, each other. By installing partition walls and/or doors one could arrange his home space that suits the taste of his family and make it functional.



k. **The placement of a house in its immediate physical environment.**



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Home yards are to be utilized in such a way that besides they remain productive and become nice views also healthy environments. A home yard of 0.25 hectare can be used as a living inn, living dispensary, vegetable and fast growing fruit tree garden, and to grow seasonal food crops such as sweet potatoes, cassava, bananas, etc.

Tall growing fruit trees with dense foliage such as manggo and rambutan are to be planted west to a house to serve as protection against hot sunray in the afternoon. Poultry and small ruminant coops, and stables for big ruminants, are to be placed east to the back of the house to avoid negative effects on air and wind flowing through the house. Living fences around home garden may best consist of legumes such as fast growing gliricidea, sesbania grandiflora which serve as wind break, animal feed, and green manure. Experience shows that good utilization of a 0.25 hectare of home garden applying well arranged rotation system produces enough food (except rice) of balance nutritious value, simultaneously help save home expenditures, and increase income.

Locally suitable, badly needed, and integratedly developed farming and settlement systems within the intended target beneficiary's financial, technological, and labour providing capabilities and capacities will definitely draw the attention, and generate the willingness, of non-BDH participants to adopt the introduced BDH's activities at their own expenses. The speed of this change process will much depend on the success of these two important components of the BDH at the field level which should be undertaken in the same location.

As also in the case of the development and dissemination process of the integrated farming systems, the rehabilitation of the old and the development of new, settlements are to be undertaken in orderly and systematic stages. The site selection is to be based on facts that the chosen site will have a large influence area, a good economic prospect, and a broad access to sources of needed development inputs in the immediate future after BDH's support termination.

By consistent application of the above strategies, it is expected that the local governments and the technical /line agencies in charge of eliminating rural structural poverty and assisting underdeveloped rural villages to achieve self- propelling growth,

will gradually take over the BDH's initiatives. It is therefore important that BDH's activities are to be developed also in orderly stages i.e. pilot, model, demonstration, diffusion and generalization.

2.3. Area and Regional Development.

The agricultural sector (in broad sense) always plays a key role in the changes of the economic, social, and political structures. Experiences and evidences show that this happens everywhere, even in highly developed countries. In spite of differences and high varieties of natural resources, population growth, agricultural development systems, policies, approaches and strategies, countries/regions/areas that have specific, and consistently apply, integrated farming systems that are flexible and dynamic enough to meet environmental changes and demands are able to achieve better comprehensive economic growth than those do not and continually apply static agricultural systems.

The integrated agricultural systems planned to be applied by the BDH are the flexible and dynamic ones. The intended target beneficiaries who consistently apply these systems are expected to get economic progress.

This progress will automatically cause some changes in the local economic and social structures, simultaneously more progressive polical views of the local people.
Settlements having progressive economic,social and political life will definitely become the cores of, and contribute to, their respective area development due to their influence on their neighbouring settlements. Areas of the same capacities will do the same influence to their respective neighbouring areas which all together become developed regions.

All these developed area and regions will structurally serve as market services distribution centers for their respective influence areas. The harmonious, beneficial and profitable interactive relationship between centres will certainly demand appropriate economic, social and administrative infrastructures and facilities suitable to meet their respective development progress and positions.

The development of areas and regions are beyond the tasks of the BDH; they are the local governments' together with their respective technical and non-technical agencies.

To correctly determine the sites for the construction of economic, social, administration's and security's infrastructures, facilities and utilities within an area or a region acceptable to all parties that use land as one of their development inputs, a spatial plan to refer to should be available. FIGURE VII shows the process of spatial planning.

3. HEALTH AND NUTRITION DEVELOPMENT COMPONENT.

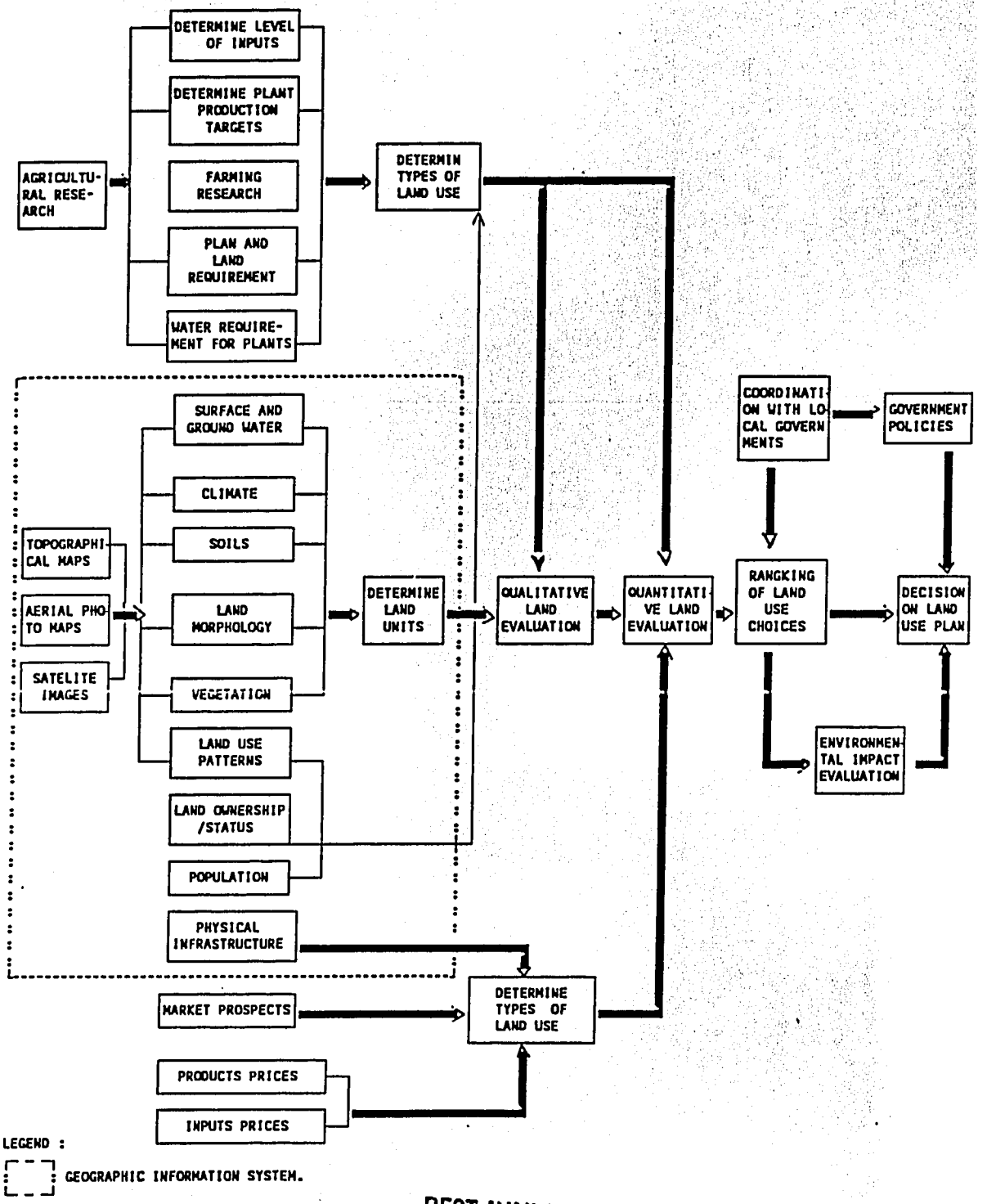
The integrated farming, settlement, and area/regional development, systems have been discussed in the preceding pages. Those components all together are closely related and contribute much to health (in broad sense) development i.e physical, spiritual, and social health. Integrated farming systems insure the availability of broad varieties of food and herbiage. House construction, the position of a houses within its productive physical environment, healthy and secure settlement patterns, orderly area and regional development patterns that insure speedy and smooth distribution of goods and services to meet the needs as factors supportive to the realization of the stipulated community welfare, have to a certain extent been discussed.

From health's point of view, those two BDH's development components, either individually or jointly, play bigger roles in prevention of diseases than cures. Therefore, the BDH is to focus its attention to this dimension of health development which can be spontaneously undertaken by the intended target beneficiaries at their own expenses. More specifically, the nutrition dimension which plays an important role in health development including prevention of diseases and other hazards is to be intensively promoted to the beneficiaries.

3.1. Health And Nutrition Problem Solving Strategy.

Efforts to overcome nutrition deficiencies will achieve successful and sustainable results if the intended target

FIGURE VII
SPATIAL PLANNING PROCESS



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beneficiaries actively and effectively undertake the efforts themselves. Efforts to prevent the emergence of diseases and nutrition deficiencies undertaken by outsiders will not be as effective as those done by the very beneficiaries conserned.

Nutrition deficiences and their negative effects on human growth and productivity require joint efforts directed towards prevention of this problem. Experience shows that the degree of direct and active involvement of the intended target beneficiaries, their understanding about the problem, and their participation in problem solving, are determinant to the degree of the accomplishment of the efforts.

The involvement of the communities in identifying health and nutrition problems, in planning and implementation of planned measures to overcome the problems should be encouraged and established since the very beginning of the BDH program.
The strategy for solving the problems is as follows:

3.1.1. The intended target beneficiaries recognize the hazards of nutrition deficiences.

People may be used to seeing many very thin or much swollen children and eventually die. They possibly know the underlying reasons but they may not realize that undernourished children who manage to stay alive will not be able to become vigorous, productive, and creative adults. Adults who suffered undernourishment during their childhood very easily fall into despair and explode into unbridled anger.

Opinion that says that prevention of diseases also needs a lot money can be countered by very simple activities such as hand washing before meals and taking care of babies, airing bedroom items, washing kitchen wares, boiling food and drinking water, keeping the house and its surrounding clean, regular and safe disposal of garbage and waste, and many other activities. Immunation now widely practiced is also important in preventing various diseases.

The intended target beneficiaries or communities ought to be given understanding that health problems is not mere individual concern but also whole community's.

Every child who definitely suffers from nutrition deficiency and ailments will cause at least ten other presently healthy-looking children to suffer similar ailments.

Further more, on places where many undernourished children are found there surely will be many undernourished adults and aged people, together with their negative effects.

Preventive measures against diseases and malnutrition could not successfully undertaken by individuals but should jointly be done by the whole communities; they could not be effectively done by outsiders but should be undertaken by the very communities directly concerned.

3.1.2. The Roles of BDH's Field Workers.

In the efforts to generate understanding of the importance of diseases and malnourishment prevention on the part of the intended target beneficiaries, the BDH's field workers serve as facilitators. Facilitator's functions related to health and nutrition development are to be considered as an integral part of the total functions related to the whole BDH program's components. The facilitators are to have a good command of knowledge related to health problems in general, and nutrition problems in particular, to enable them to make beneficiaries understand, motivated and prepared to take active measures against those problems. They are not required to be professional health and nutrition development agents, but they are required to have skills in communication with, approaching and building trust and credibility on the part of, the beneficiaries; have skills in motivating them to take measures, and have self-reliant capabilities to continually and sustainably prevent diseases and nutrition deficiences. In establishing communities' understanding of the problems, cooperation and teamwork in deciding applicable plans and plan implementation, the facilitators are suggested to use group discussions, brainstorming, and synthetically mutual agreement. This approach encourages members of the community to actively participate in determining solutions of their mutual problems, at the same time enhancing their value system and capability to freely express themselves.

If governmentally paid health extension workers and trainers have been available on-site, the BDH facilitators are to do their tasks in close cooperation and teamwork with them.

3.2. Important Aspects To Know.

Important aspects that the BDH facilitators are to know well in prevention of diseases and malnutrition are as follows:

3.2.1. Relevant informations.

Informations that are to collected are those concerning:

a. The characteristics of the intended target beneficiaries i.e.

   a.1. Their daily way of life;
   a.2. Traditional leaders and their respective authority patterns;
   a.3. Customs, socio-culture, and beliefs;
   a.4. Occupations and income sources;
   a.5. Degree of education, and
   a.6. Priorities of life that bear pressure on the community.

b. Health problems that most frequently emerge such as general infections and parasites.

c. Food.

   c.1. Traditional food patterns;
   c.2. Belief concerning certain kind of food, kind of food most liked and prohibited and their respective underlying reasons;
   c.3. Kitchen utensils mostly used, food storing ways, water sources, fuel woods and their relevant difficulties to obtain, cooking methods, and methods of food distribution in families;
   c.4. Kind of food of pride.

d. Food sources.

d.1. Food stuff produced in the community's own farm and home gardens;
d.2. Food stuff purchased in markets.

e. Environmental hygiene.

Information collected are important to the BDH facilitators in deciding approaches, strategies and activities to establish community's believe in, and sympathy with, them which form a basis for gradual changes in traditional customs disbeneficial to health.

Example : Dirty condition in the house , erroneous placement of home appliances, usually make family members suffer from stomachache and infections. Health condition will be worse if methods of food and food stuff handling and storing are wrong. This very bad health condition will be exacerbated if the utensils for food cooking, storing and serving are also dirty.

3.2.2. Plan designing.

Based on the informations collected, the BDH's facilitators design plans. Plans will be most acceptable to the intended target beneficiaries if they are easy to understand, simple, and do not need much changes in their traditional ways.

The plans will possibly comprise:

a. Combination of foods appropriate for babies, infants, grown-ups, adults, aged people, and when to serve;

b. Locations /sites where women will be given training to prepare food, ways to clean home appliances, and who is to be the trainer.

c. Methods to encourage the target beneficiaries to apply their training results in their daily life.

d. Who are and how to supervise, monitor and evaluate the achievements of the recommended practices, and apply corrective measures.

3.3. Health and Nutrition Education and Extension

Health and nutrition extension and education are generally undertaken by community health centres and sub-centres, Integrated Health Service Stations, midwives, trained traditional midwives, health cadres, Family Welfare Development Program field workers, and by special health officials who at certain occasions come from towns. Due to the fact that those health and nutrition extension workers and trainers are not available in most of the remote BDH sites, the BDH facilitators, both males and females, are to regularly undertake health and nutrition extension and education activities.

To insure successful performance of the BDH facilitators, some aspects are to be seriously taken into consideration:

a. Education and training for each level and group of BDH field implementors (facilitators, motivators, advisors, resource persons) are to be regularly undertaken and specifically focused on health and nutrition problems and their solutions. The higher their knowledge and skills, the more successful their undertaking.

b. Health and nutrition education and extension are given to male and female, young and old, members of the community. Farmers who know that certain plants are highly valuable for his family and community health, know that nutritious foods are highly valuable for intelligence, creativity and behaviour of their off-spring, will most probably be motivated to work hard to provide their families with those kind of food.

c. The impacts of successful health and nutrition education and extension could not be readily seen within a short time, but continual and sustainable practices of the results of education and extension depend much on the facilitators' personalities. They

have to be firm, have high sense of humour and sympathetic behaviour. They are required to be readily available for discussions, meeting invitations. Messages that are informally delivered generate more impression than those delivered in formal, rigid and one -way communication methodology.

d. The timing and duration of messages delivery should be appropriate. Messages delivered in very busy seasons, days and time such as agricultural land preparation, harvesting, national commemoration days, performing religions rituals, babies and children caring, cooking, etc will not produce satisfactory results. Duration of education and extension activities are to be short, and materials to be presented are to be concise.

e. Each meeting to discuss health and nutrition problems and their solutions will best be attended by not more than 20 to 30 participants to allow each of them enough time to express his opinions, suggestions, aspirations and proposals, and exchange empirical experiences.

f. Visual aids used in health and nutrition education and extension should best be goods or materials that are readily and locally available, or easily purchased at the local markets. Visual aids that could be locally made such as "fuel wood saving lorena stoves" will be more effective in demonstration than those made in far away places.

g. At times when symptoms of stomachache or vitamin deficiency emerge, the facilitator are to speedily undertake extension to prevent epidemic diseases and vitamin deficiencies by displaying relevant kind of food stuff available locally or easily purchased at local markets, food cooking methods, balance between types of food prepared in households, cleanliness of kitchen wares and utensils used in preparing and serving food.

3.4. Nutrition deficiency.

Most of the BDH intended target beneficiaries are economically weak. It is reported that approximately 95% of the total number of forest villages situated within and around Forest Concession Rights areas fall into underdevelop village category. Nutrition and food deficiences that frequently occur are really relatively easy to avoid if only the communities know why those problems happen an how to prevent them by effective and efficient measures.

Many diseases are direct aftermaths of nutrition deficiency and other diseases are indirect aftermaths of food deficiences. These diseases attack mostly babies and infants. Diseases suffered by babies and children are related to age, environment and food delivery patterns.

Diseases attacking newly born babies are very oftenly related to premature birth, low body weight, birth processes that cause injuries and breathing difficulties. Prematurely born babies or those whose growth are not normal very oftenly suffer difficulties in breast feeding, maintaining body temperatures, in converting sugar into energy, and in the prevention of specific infections, when they live in places surrounded by dirty environments. Babies who suffer from nutrition deficiency, at the age of one month, tends to bevulnerable to tuberculosis, whooping cough, and even measles. After three months old, parasites and ancylostamatidals start attacking which cause diarrhera.

The effects of nutrition deficiency suffered by pregnant mothers and newly-born babies should be known to mothers and fathers in order that they could take proper preventive measures against nutrition deficiency such as providing enough nutritious food which is served in proper ways.

High risk factors related to nutrition condition of babies and infants that mothers and fathers must know are among others: low body weight of newly-born babies, twin birth or more than two, relatively short birth intervals, and high mortality rate of babies of less than 12 month old; measles, whooping cough, and diarrhaea that frequently occur in the early life of infants; the passing away of any one of the

parents; general poverty, and the initial year of migrating mothers to new areas. By knowing those high risk factors, each family of the target beneficiaries will try to find ways to prevent health and nutrition problems from happening. Cassava leaves, ipornoea reptans/kangkung, spinach, taro; legumes such as groundnuts, soybean, green peas, phaseolus vulgarism/buncis; fruits such as banana, paw-paw, manggo; are food stuff containing enough protein, lime, iron, carotid and vitamin (c). These plants are easy to grow, anywhere. Herbiage such ginger, alpine galanga/lengkuas, avocado, averrhoa carambola/belimbing, chili, whose leaves could be made traditional herbiage, could grow well, anywhere. The constraint is that most of the local communities do not know the medicinal value of those plants. The BDH facilitators will have a lot of opportunities to assist the local communities in the prevention of health problems by making optimum use of those medicinal plants.

4. EDUCATION COMPONENT

The BDH participation in education development ought to be more focused on educational needs which are directly relevant to BDH's economic, settlement, health and nutrition development components than on general/basic education.

Training courses that have been available in the HPH's work areas and directly related to the implementation of the BDH program are to be given serious attention. If need be, the BDH provides technical and/or financial assistance. Training courses directly related to the BDH program but still unavailable on-site are to be founded and financed by the BDH during their initial years. Step-by-step take over of educational institutions initially introduced by BDH by parties outside BDH's organization will be both financially and socially beneficial to the BDH.

Non-formal and informal education for the intended target beneficiaries are undertaken by the BDH field staffs, both extension workers and field skill trainers.

Experience shows that religious education is as important as technical education in programs or projects, the success of which

are determined by the degree of active participation of the target beneficiaries. Religions turn to be the very power that determines the dominant motif of the beneficiaries to accept or reject external initiatives. Dominant motifs that are strongly based on religion will results in continuous and sustainable cooperation and teamwork between the communities themselves, and between the communities and the BDH field staff members.

PART II.

GENERAL APPROACHES AND STRATEGIES TO ENHANCE THE ROLES OF LOCAL COMMUNITIES IN THE DEVELOPMENT OF FORESTRY RESOURCES.

1. TARGET BENEFICIARIES

For practical purposes, the BDH program should deal with three different beneficiary groups i.e. the intended, the desired, and the potential beneficiary groups. These groups will jointly contribute to the achievement of the stipulated BDH goals i.e. the welfare of the local communities and the sustainability of forest resources. Weaknesses, shortcomings, constraints of any one of these three beneficiary groups will exert negative effects on, and will hamper, the BDH development process.

1.1. The Intended Target Beneficiaries.

This beneficiary group comprises:

a. Communities living within the work area of HPHs/Forest Concession Rights Enterprises.

Most members of these communities are local indigeneous people who practice shifting cultivation and forest products harvesting. To a certain extent, they undertake "ekonomi kekeluargaan/kinship economy" i.e. cooperation between HPH's field operators and local community members in harvesting forest products.

b. **Communities living along the boundaries of the HPH's work areas.**

Members of these communities are partly indigeneous people and partly migrants. Some members of this group are still practicing shifting cultivation and forest products harvesting, some have been practicing sedentary cultivation within or without forest land area. Their access to forest land areas is still high.

c. **Communities living outside HPH's work areas.**

Most members of these communities practices sedentary cultivation. Only a small number are still practicing shifting cultivation and illegal forest products harvesting. Some members of these communities earn their income from off-farm jobs generated by governmental routine and development services, trades, small home and modern forest and agricultural product processing industries, transportation, etc. The access of this group of beneficiaries to forest areas is low.

The general characteristics of the intended target beneficiaries are as follows:

a. Due to their low and weak economic status, they fall into "Below poverty line group" category. Reports say that their average annual disposable income per capita is less than Rp 166,000.-

b. Except the transmigrants', land property ownership of the indigeneous people is not clear and tends to be confusing.

c. Their main assets for improving their poor economic status consist of labour, their desire for economic improvement, and willingness to cooperates with their kind and others. Their capabilities in providing necessary purchased inputs are very low, if none at all.

d. Their life quality and human resources development indices are low as shown by higher infant mortality

rate, lower life expectancy, shorter total education year, and poorer purchasing power, than the national average.

e. Access to technical and non-technical information sources, to complementary and supplementary capital /credit sources, to those having power for decision and policy making, are low, if not non-existent at all.

f. Do not have or are not voting members of any, community organizations (outside formal or semi-formal governmentally sponsored or founded community organizations), which could be made vehicles for capabilities improvement badly needed in their efforts to promote their economic status and to detach themselves from any situations that exert pressures on their creativity, specifically from those deliberately created by local elites.
Their bargaining positions are weak.

g. Traditional sources of means to meet their very basic needs are rapidly decreasing as logical consequences of external interventions whose power is beyond their antagonistic capacity to counter.

The sites and patterns of the intended target beneficiaries vary from place to place. The settlements may be situated either in mountainous, hilly, undulating areas; in high land, low land areas; around swamps, along beaches, or river sides. The settlement may be in cluster, scattered, radial, ribbon or linear patterns.

The dominant motif of the target beneficiaries to accept or reject externally introduced economic and social technologies which determines their willingness and preparedness to actively participate in a program or project development by providing land, labour, material, fund/money; by joining themselves into organization and management systems, varies from time to time and from place to place.

This dominant motif is formed by exogenous elements such as social factors that may consist of religions, beliefs, customs, aspirations, value systems, prides, aesthetics,

fears, worries; by economic factors such as the degree of development inputs availability i.e. capital /credit, extension, training, labour, the degree of market possibilities, and by general factor, such as population growth, general economic, social, political and environmental situations and conditions.

FIGURE VIII shows the elements and factors that influence the formation of the dominant motif of the target beneficiaries.

The capability and suitability of land presently under the management of, or will be specifically provided for, the intended target beneficiaries, will also vary from place to place. The BDH's intended target beneficiaries are designed to have capabilities to voluntarily disseminate BDH activities, benefits and empirical experiences to their neighbouring communities who are non-BDH participants.

1.2. The Desired Target Beneficiaries.

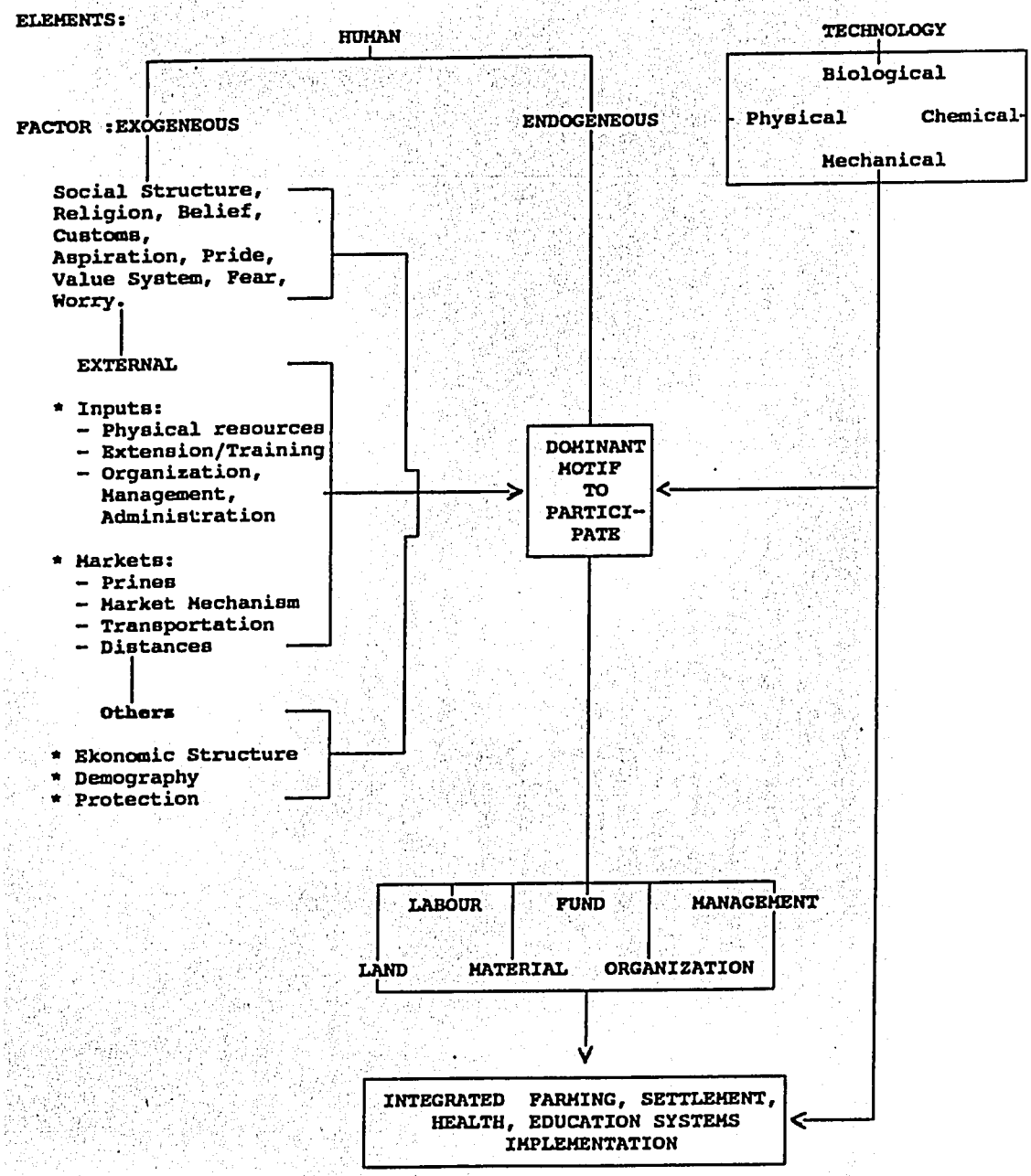
This target group comprises two distinctly different subgroups, each have its own tasks and functions but very closely interrelated with each other's.

a. The Forestry Ministry Organizations.

This subgroup bears the responsibility of producing BDH policies, approaches and strategies that are appropriately designed for bridging those policies into practices; organization of activities, manpower and institutions to sustain coordination of functions, cooperation and teamwork; applicable but simple administration; appropriate management system to keep BDH activities on the right track, effective and efficient. All those aspects are to closely and consistently addhered to by the HPHs as responsibility bearer for the successful implementation of BDH program at the field level, and by the echelons of the ministry at regional level who are in charge of performing evaluation, monitoring and necessitated corrective measures at the field level.

The Forestry Ministry echelons are also responsible for placing BDH program as an integral part of the national, provincial and local development policies, both long-term, five year, and annual.

FIGURE VIII
ELEMENTS AND FACTORS INFLUENCING FORMATION OF DOMINANT MOTIFS FOR ACTIVE PARTICIPATION



b. The Forest Concession Rights Enterprises/ HPHs.

The HPHs bear responsibility for designing and implementing long-term and five-year BDH programs, and annual BDH projects. The first is to be an integral part of the long-term forest exploitation plan, the second of the five year, and the third of the annual forest exploitation plan.
All those plans are to be interrelated. The first is to serve as reference for the second, the latter for the third.

In designing and implementing those plans, the HPHs are to apply the BDH policies, approaches, strategies; organization, administration and management systems that have been decided by the Ministry of Forestry. The HPHs are also to take local characteristics into consideration to insure that the resulting plan are financially justifiable, socio-politically acceptable to the local communities and governments.

These two subgroups, until now, have not had appropriate and sufficient knowledge, skills and experience to meet their respective responsibilities. Hence, they are also considered as BDH's target beneficiaries.

1.3. The Potential Target Beneficiaries.

The potential target beneficiaries of BDH are parties who are not directly involved in the BDH management but are expected to adopt BDH's successful technologies, methodologies and empirical experience for their own economic and social advancement. This group comprises two subgroups, i.e. the local governments together with their respective technical and non-technical agencies, and the non - BDH participating communities.

a. The Local Governments.

The local governments together with their respective technical and non-technical agencies are expected to adopt and vertically and spontaneously disseminate BDH's successful technologies, methodologies and

empirical experiences, if need be, adapt them to suit local characteristics. By doing so, local area and regional development processes can be more effectively, efficiently and speedily undertaken.

b. **The non-BDH participating communities.**

This group will receive technical assistance from the BDH participating communities, and the technical and non-technical agencies under the coordination of the local governments.

The adoption of the successful BDH's aspects by the potential target beneficiaries will accelerate equitable socio-economic development in the region and hence prevent the growth of new shifting cultivators and forest product harvesters.

The commitment, consistency, knowledge and skills of the local government officials and the non-BDH participating communities are to deliberately established. Hence, they are also BDH's target beneficiaries.

2. APPROACHES AND STRATEGIES.

This study discusses approaches and strategies thought able to help improve the development of economy simultaneous with social development. Both are directed to produce benefits and raise the capabilities of the intended, desired, and potential BDH target beneficiaries..

2.1. Approaches.

a. **Conventional approach.**

The conventional approach which is economic development oriented focuses its attention to the availability of job opportunities. The emphasis is the increase of production, skills and needs of the intended target beneficiaries for goods and services they themselves could produce by utilizing their labour, their preparedness to cooperate and their desire for better

livelihood. It is basically meant to eliminate poverty. The orientation of the economic development very oftenly does not achieve its purposes because in certain locations and at certain occasions, the very party that benefit most are the local and rural powerful segment of the community and elites. The aftermath is the increased economic inequities. Assets and power in their various forms are accumulated in the hands of a small number of rural community members.

b. Basic needs approach.

Another alternative approach to produce benefits and increase the capabilities of the intended target beneficiaries is called the basic needs approach. The priority of this approach is the fulfilment of human basic needs i.e. food, clothes, housing, health, education, environment, value systems, security, self-reliance, and independency.

The basic needs approach requires active participation of all parties involved in the efforts to meet those basic needs, most specifically the participation of the target beneficiaries. Their participation comprises participation in determining all aspects of project development plans, participation in the implementation of the project; participation in monitoring and evaluation of the project progress, participation in determining corrective measures related to project assistance /support delivery, support deliverers, support receivers, quality of assistance, services rendered, in the application of those measures; participation in deciding methods of controlling, supervising and directing project activities towards the realization of stipulated inputs, outputs, purposes and goals of the project. In short, the intended target beneficiaries' active participation should comprise all project development aspects, management processes and management stages (project planning, implementation; operation, maintenance and development of outputs; dissemination of project activities and benefits horizontally and vertically).

Target beneficiaries' participation which is limited to the operation of, and receiving benefits from, the project outputs means that the project manager applies charity approach i.e. providing social services to people based on assumptions that the

receivers are passive people who do not have any capabilities nor status. This charity approach are frequently applied only to prove that the giver has fully met his tasks, functions and duties assigned by his superiors. The form of the services rendered may be road rehabilitation, volley ball equipment, recruitment of a school teacher, a fish pond construction, very simple houses, planting materials, etc. This approach is basically a top-down or conventional one which does not allow the receivers to develop their capability to establish their self-help capacity within a relatively short time.

If the BDH program is really meant to make the target beneficiaries have the capability to develop themselves through their self-help capacity, the BDH should consistently apply the basic needs approach because this approach comprises motivation, education, organization, culture, management, and practical technologies. This approach induces social and political changes as bases for structural changes, particularly social, economic, and political changes in rural areas. FIGURE IX shows the application of "Participatory And Interactive Decision Making" processes in project plan formulation; FIGURE X shows the same processes in project implementation.

3. STRATEGIES.

3.1. Financing.

The application of basic needs approach in the comprehensive and integrated BDH program aimed at rural community development takes plenty of time and money. It is also not easy to do.

To overcome existing and possibly emerging problems and constraints during the implementation process, some strategies that are realistic from financing and also realistic from technical, points of view, are to be applied.

A strategy to minimize BDH project implementation cost without adverse effects on the effectiveness and efficiency of the inputs utilization, without endangering the continuity and sustainability of BDH activities and benefits, and without reducing capabilities to solve

FIGURE IX
PARTICIPATORY AND INTERACTIVE DECISION MAKING PROCESSES IN BDH PROJECT PLAN FORMULATION

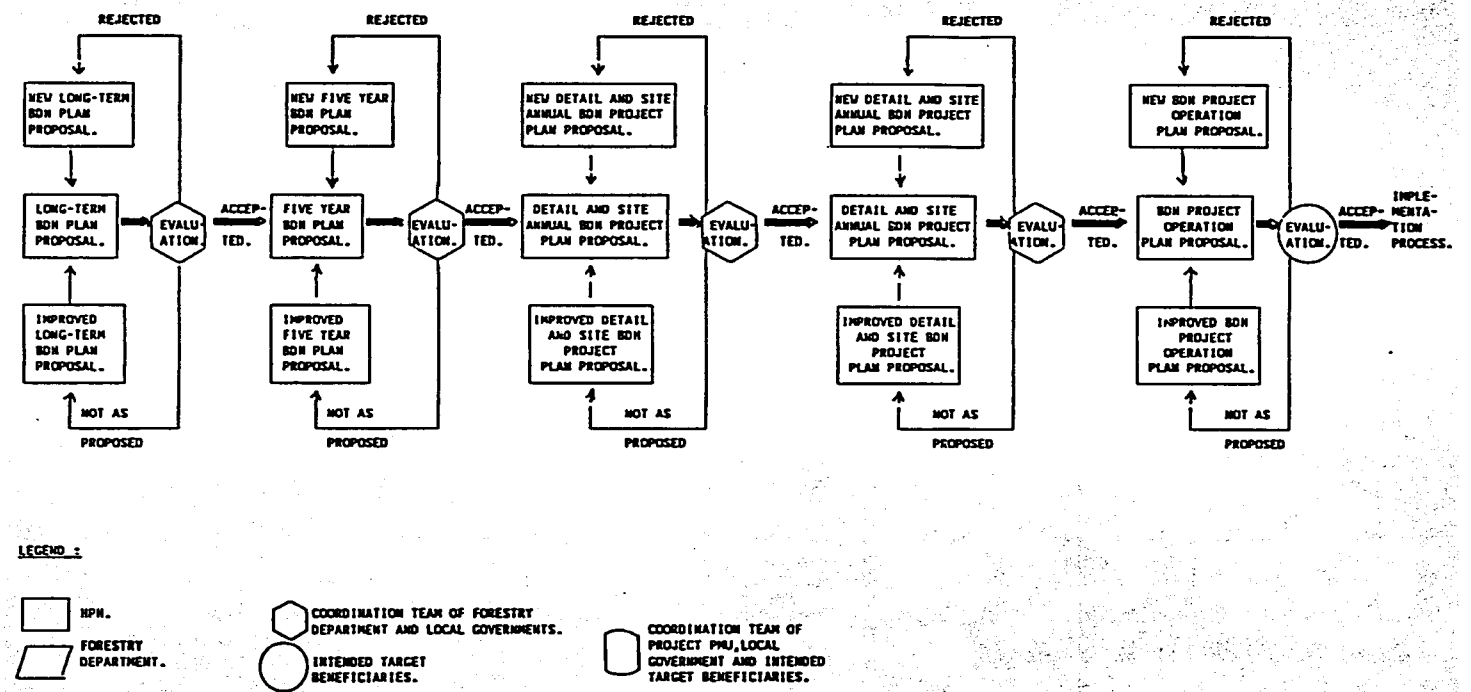


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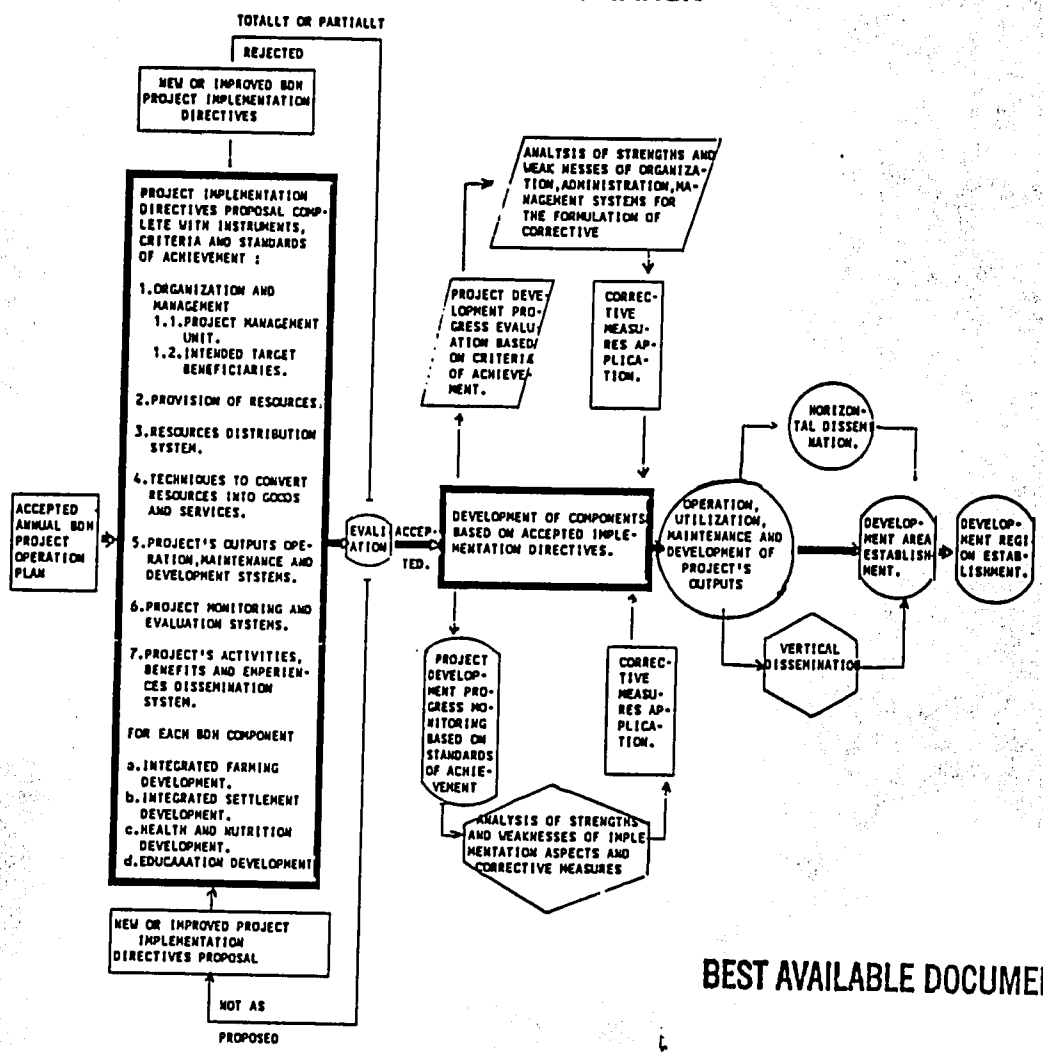
FIGURE X
PARTICIPATORY AND INTERACTIVE DECISION MAKING PROCESSES IN BDH PROJECT IMPLEMENTATION



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existing and anticipated problems and constraints, is described as follows:

a. Utilize locally idle labour as much as possible, both men and women.

b. Increase available labour productivity as high as possible by introduction and application of appropriate technologies, and labour; energy- and time-saving instruments and tools.

c. Utilize locally available and produced materials as much as possible.

d. Adjust and integrate various BDH activities with local development activities funded by Rural, Underdeveloped Village, District, Provincial INPRES and sectoral, projects.

e. Encourage and develop target beneficiaries' and local communities' initiatives in the solution of their own problems and constraints.

f. Establish and institutionalize target beneficiaries' capabilities to operate, maintain and develop BDH project outputs.

This strategy demands continuously active participation of the target beneficiaries in organizing activities and institutions during the implementation of the stipulated BDH management stages and processes.

Only by consistent application of resources utilization and establishment of active participation strategies, most of the available resources could be made available and effectively contribute to the realization of the stipulated outputs. In addition, problems and constraints could be solved without applying coercive measures. BDH roles, by applying those strategies, function to develop self-actualization process of the target beneficiaries, and simultaneously to avoid the BDH from applying centralization which tends to force the intended target beneficiaries to do things that have been decided elsewhere

without their consent which eventually make them highly dependent on outsiders.

Some people say that those strategies will result in excessive development burden to the target beneficiaries or worsen inequity in development processes because those who have resources are to provide more resources for their own advancement, but experiences show that approaches and strategies which are not fully directed towards the establishment and institutionalization of self-help and self-reliance capabilities of the target beneficiaries invite never ending dependency and inferiority. Except in cases where the target beneficiaries are proven to be really very poor economically, socially, culturally and politically, the strategy to reduce BDH's financial input ought to be reconsidered. FIGURE XI shows the factors and application of the proposed BDH project financing strategy which simultaneously insure the continuity and sustainability of BDH's activities and benefits, using dynamic equation theoretical thesis as the underlying basis.

3.2. BDH's Implementation Organization.

Forest Concession Rights Enterprises /HPHs which are profit-oriented definitely have organizational structures, management practices and behaviour, personnel selection and placement, very carefully calculated able to fully support smooth profit-oriented operations. The BDH program and projects, whose successful performance and economic, social and environmental impacts are to be beneficial to the intended target beneficiaries, do not have the same enterprises' orientation because BDH's goals, purposes, outputs and inputs; technologies; motivation, organization, management and personnel qualifications are to be fully oriented to poor communities.

Based on these differences of orientation, BDH will be effective in achieving its objectives if it is managed by an organization specifically founded for BDH, but whose position in still within HPH management organization. This BDH management organization is preferred to be temporary because its main task is to transfer BDH technologies; motivation, participation, organization and management

FIGURE XI
THE APPLICATION OF DYNAMIC EQUATION THESIS
IN
BDH PROGRAM/PROJECT FINANCING

D = S X P - R

GROWTH :	SAVING/CAPITAL:	PRODUCTIVITY:	POPULATION GROWTH:
Economic, social, political, environmental, self-reliance development accelerated by changes in S, P and R factors.	Land, labour, material fund, enlarged by projects funded by : 1. Provincial, District, Village INPRES; 2. Special Assistance; 3. Sectoral; 4. Provincial, District, Village Governments' budgets; 5. Grants from overseas governments; 6. The larget beneficiaries.	Enhanced by: 1. Technologies; 2. Motivation; 3. Participation; 4. Organization; 5. Management; 6. Health; 7. Vitality; 8. Education and skills; 9. Self-reliance.	Decreased by: 1. Birth control; 2. Heightened wedding age median; 3. Lengthened schooling age median; 4. Migration; 4.1. Transmigration. 4.2. Circular migration. 4.3. Commuting migration.

systems, to the target beneficiaries. This organization may be called "BDH Project Management Unit/PMU".

In contrast with PMUs generally founded by sectoral institutions for single-fashion activities, BDH's PMUs are founded to manage multi-fashion activities due to BDH's complexity, comprehensiveness, dynamics, and flexibility.

To be fully able to perform its tasks and functions, BDH's PMU will be given broad authority and acts as a catalyst.

The main role of the PMU as a catalyst is to make the HPH management, the Forestry Department and her echelons, the provincial and district governments and their respective technical and non-technical agencies related to rural development, and other institutions involved and interested in rural community advancement, realize and recognize BDH needs and target beneficiaries; assist the target beneficiaries in acquiring goods and services needed as inputs to perform their respective role in economic, social, environmental, organizational and managerial development activities; and last but not least assist their in enhancing and institutionalizing their self-help and self-reliance capabilities.

The characteristics of a PMU as catalyst are as follows:

a. To disseminate basic thoughts of the importance of changing single-fashion sectoral development into comprehensive and integrated inter-sectoral. Those changes are to be directed towards increased productivity of resources, enhancing decision making based on self-reliance, and equity of activities and benefit distribution.

b. To serve as a liaison organization between HPH management organization and the intended, desired and potential target beneficiaries; to smoothen exchanges of productive informations, enhance mutual understanding, commitment, consistency, and to smoothen the application of goods and services delivery system.

c. To serve as research field implementor, particularly in the development of pilot, model, demonstration projects; diffusion and dissemination of successful research results that have been mature enough for generalization. All these activities are to be performed with active participation of the target beneficiaries.

d. To serve as training and extension agency for the target beneficiaries and as a producer of development cadres originally selected members of the target beneficiaries. These cadres will horizontally disseminate BDH activities, benefits and empirical experiences to neighbouring communities.

e. To identify outstanding local development cadres and specifically train and make them have perfect command of certain aspects of BDH program. These cadres will serve as agents of development and agents of change in their own development areas.

f. To initiate, if need be, processes directed toward the founding and establishment of intended target beneficiaries' organizations well able to operate based on their own self-propelling power.

The main characteristic of the BDH's PMU is its efforts and capabilities to produce positive changes on the part of the target beneficiaries, both their physical and non-physical environment.

3.3. Social Technology for socio-economic change.

Some may look at the participation in group action as a matter of individual choices; if the right incentives are provided a person participates, but if disincentives exist, he does not. From this point, participation is mostly a matter of correctly manipulating incentives. Many policy makers have this perspective in distributing public goods and services. Experiences show that for the target beneficiaries who have inferior mobility and institutional access, which places special barriers to many activities, participation is not a response to a few standardized

incentives. Appropriate organizational techniques need to be adapted to the circumstances and needs of the target beneficiaries. These organizational techniques are called "social technology".

Conciousness-raising methodologies which are directed toward the building up of self-dignity and decision making capabilities of poor target groups in environments that are highly stratified, exploitative and /or culturally repressive, play a very important role.

Men and women are encouraged to see themselves as active, and creative subjects with the capacity to examine critically, interact productively with, and transform, their natural and social environments rather than accepting existing practices or authorities forced to them.

Social technology particularly emphasizes a deliberate self-questioning process to look for alternative ways of social action. It is essential to this methodology that the search for solutions be initiated from within a group in order that their capacity to make decision and reach a concensus for collective action, is strengthened.

BDH's PMus, and other similar organizations, which act for, and on the name of, HPH management, may have broad authority in the BDH implementation but their activities may not be participatory. PMUs which are designed to apply decentralized BDH's authority but do not practice participatory decision making processes in planning, implementation, monitoring, evaluation, corrective measures, actually practices paternalistic role. If this happens, the program is the focal point as against the development of the target beneficiaries which the program is organized to serve.

In contrast, a catalytic approach emphasizes the community, its members and their involvement as focal point for change. This excludes making decision within the PMUs and then using money or social coercion to make the target beneficiaries agree to what have been decided for them. Catalytic approach emphasizes non-formal education techniques that will allow the target beneficiaries to define their problems, examine

them, and decide on a basis for problem resolution. Such methods can include giving target beneficiaries appropriate technical information they may need to make decisions, but the target groups remain the decision makers because they are the very party who is to come up with the answers, not the PMUs or catalysts.

Among programs that emphasize self-direction and group action, there seem to be two type. One is more oriented to fostering self-help and mutual aid, striving for a relatively harmonious increase in assets and skills. The other type is more oriented toward confrontation with local elites, government agencies or other holders of power.

The confrontation approach may not seek violence, but it will make people more aware of differentials and abuses of power, and its explores direct ways of changing domination patterns. An important objective of the confrontation approach is to create greater group solidarity and capacity to act as an effective pressure group. Such a strategy may tend to downplay activities that emphasizes individual opportunities or development along non-egalitarian lines.

The self-help and confrontation approaches are not necessarily opposite forms of community organizing. The former may be the antecedent of the latter in the first stages of group action or when people lack a clearly focused opponent or issue of contention. The latter may, on the other hand, give impetus to people for group efforts which, once authorities become more accommodating, can be cooperative in nature.

3.4. Techniques to support the development of self-reliant processes among the intended target beneficiaries.

A BDH's PMU serving as a catalyst organization is to carry out four types of activities which by experience contribute much in the development of the self-reliant capacities of the economically, socially and politically unfortunate target beneficiaries.

First : Through some form of non-formal adult education, the catalyst agent makes the target groups aware of their common problems and teaches them something about tools for problem solving and group action.

Second : The catalyst agent changes the attitudes of the target groups about the way they see themselves and their relationship to their natural and social environment.

Third : The catalyst agent builds organizations for group action within communities, among communities, and by local communities together with, or acting on, the BDH's PMU.

Fourth : The catalyst agent sets in motion processes to create assets and skills.

3.4.1. Non -formal education techniques.

Non-formal education techniques are aimed at creating concensus about common problems and their appropriate solutions.

An important factor in fostering BDH's target group action is a close and cooperative relationship between the catalyst agent and local communities which features mutual respects for the experience and resources which each party possesses that can be brought to solve local problems.

This close working relationship is not difficult to established at initial stages where the physical survival of the poorest target groups is threatened.

The establishment of a positive relationship can be more of a challenge, when the target groups are at slightly higher levelof subsistence.

Non-formal education, besides being directed toward consciousness raising and capabilities to find solutions to problems through group action is also deliberately

directed toward the enhancement of the commitment of each target group member so that each is able to meet the needs for group action.

3.4.2. Techniques to motivate the target beneficiaries to commit themselves for changes.

Another important emphasis of self-reliant strategies, one which distinguishes them from programs that concentrate purely on welfare or economic growth, is a concern with the total human being, not just his material needs, but also his psychological needs. This focus is a particularly important one for working with the target groups that are heavily dominated by other racial, caste, or ethnic groups in the society.

One direct way of building self-esteem is to provide meaningful job opportunities to disadvantaged target groups to earn an income and accumulate assets. Employment is a way to help raise their status, not only in their own eyes, but also in the opinion of other elements of the community. BDH is expected to be able to provide various choices of employment opportunities for those disadvantaged.

Another way to establish motivation of the target groups is to encourage the BDH's PMU personnel to esteem local languages and traditional customs much practiced in their daily life. Textbooks are written in local languages.

Instruments or media for motivating local communities vary from place to place such as radio programs, newspapers, mural and prints, local traditional arts, meeting houses, religion rituals, radio audience and newspaper reading groups. The latter can also function as media for building up social and economic solidarity among group members and between groups.

Another technique to motivate target groups is periodic meeting attended by members of a certain target groups and /or by several target groups living or operating within short distances from each other. These meetings are media for exchanges to technical and non-technical experiences and at certain occasions for competition of performance

achievements. This technique is basically a media for horizontal dissemination of technologies, methodologies and experiences.

3.4.3. Techniques for building organizational structures for group action.

To maintain and sustain continual and sustainable group action of the target beneficiaries, the right kind of organizational infrastructure and facilities must exist.

Appropriate target group organizations might take the form of local formal organizations such as Village Community Councils, Village Community Resilience Organizations; semi-formal organizations such Family Welfare Program Movements, neighbourhood associations; also non-formal such as upland/ /low-land farmer associations, rotational saving groups, local small trader organizations. What matters is not whether the organizations are formal, semi-formal or non-formal, closely geared to authority or not but what happens within it.

The characteristics of target groups organizations which are beneficial to the building up, establishment and institutionalization of the self-reliant capabilities and independency of the target groups are as follows:

First : The local target group's organizations have formal authority and actual ability to initiate projects.

Second : The local target group's organizations have their own resources.

Third : The local target group's organizations have a consultative decision-making process within themselves, between them and their parent organizational structure.

The form of this consulting process will vary with cultures. They could be formalized voting, or the more

informal or concensual types of a decision-making, but they must provide local communities with a voice that is listened to.

Fourth : The local target group's organizations have a genuine shared decision-making. To realize this, the BDH project has to be, or have the prospect of becoming, relatively free of critical dependencies whether on external funding, dominant leaders, or on the outside organizers or the catalyst agents themselves.

To foster, establish and sustain the local target group's organizations having the above mentioned characteristics, the BDH's PMUs as catalyst agents do two specific activities as follows:

First : The PMUs provide the target groups with opportunities and encourage them to have their representatives which have been democratically selected to fill some positions in the PMU's organizational structure. This strategy is to share authority between the PMUs and the target beneficiaries, during the project management stages and processes.

In this kind of authority sharing, the PMUs function as permanent research organizations, designers of applicable technologies which are needed in social communication, agricultural, forestry, handicraft, home processing and village industries, and in trading activities.

Second : The PMUs encourage the local target beneficiaries to have capabilities in meeting their responsibility for project performance and authority they share, and capabilities to give speedy and correct response to the BDH initiatives.

These PMUs' activities will enhance local organizations' vitality and encourage the members of the groups to provide various resources vital to the project as their membership's duties.

Experience shows that the formation of organizations among disadvantaged social target groups must be structured at the pace at which members are prepared to cooperate together, make group decisions, and have faith in their leaders.

3.4.4. Creating employment and generating income developing processes which create local assets, and establishing the target groups' control over these assets and processes, is the most difficult and complex activity for the fostering of participation.

An important factor for successes in this area is the extent to which the actions to increase productivity are integrated with other components or activities of the project for effectiveness and efficiency of available inputs utilized.

Example :

> BDH introduces various kind of vegetables to the target beneficiaries to use of their land around their houses productively.

BDH provides high yielding variety of seeds/seedlings, fertilizers, insecticides, planting techniques training, etc. to the intended target beneficiaries. The growing of vegetables will be continual and sustainable by the target group's own initiative at their own expenses if the production process of those vegetables has been preceded by fostering the target group's understanding of the positive effects of vegetables on physical health and vitality, methods of cooking vegetables for family consumption, and techniques of marketing of vegetables if their production is more than the amount they need.

The introduction of an integrated vegetable production pattern as shown above, very clearly demands skill training courses directly relevant with acquisition of vegetable seeds/seedlings, seed nurseries, land preparation, planting/ replanting of vegetables, plants maintenance, harvesting, product quality control, etc. The courses are preferably given in local languages, presented in cheerful and attractive manner, timely, and are not in contradiction with local customs or traditions.

3.4.5. Enhancement of women roles in productive economic activities.

Rural women in poor communities generally work longer hours and harder than most men in their efforts to fulfil their duties as mothers, wives and their husbands' counterparts in productive economic activities. The roles of women in the BDH program can be made more productive and broadened in scope without necessarily causing them to work more longer hours and harder. To put this purpose into effect, the BDH is suggested to implement the following activities:

<u>First</u> : Women's time and labour saving activities.

Activities and tools to save women's daily household working hours and labour are among others:

a. Fuel-wood-saving stoves.

b. Rope pumps.

c. Water delivery by gravity method using locally available material (bamboo pipes, etc).

d. Bamboo-cement water containers for rain water collecting from house roofs.

Activities and tools to save women's daily working hours and labour in cash - earning activities.

a. Simple transportation tools.

b. Pedal power water pumps and ploughs.

c. Solar energy driers using plastic sheets and bamboo as material.

Experience show that by using those tools, women's working hours and labour can be saved by about 40% without any negative effects on the amount and quality of the goods and services produced.

<u>Second</u> : Educational and skill training.

Most rural women in poor areas speak about their many specific learning requirements related to two fields:

a. Health of their families.

They need knowledge and skills pertinent to cultivation, nutrition, hygiene, and health care.

b. Remunerable skills.

They need these skills in order to earn necessary cash to improve the health and economic situation of their families and to send their children to school.

Skills such as sewing, handicrafts, new agricultural techniques, some accounting and marketing skills will be very much needed.

4. EVALUATING BDH PROJECTS PERFORMANCE AND THEIR CONTRIBUTION TO SUSTAINED DEVELOPMENT.

Discussions on operational techniques of the BDH program have been done in points 1 and 2 of Part Two of CHAPTER III, but the achievements of the program i.e. its capability to produce continual and sustainable improvement in the intended, desired and potential target beneficiaries are to be evaluated. In order to do so, there is a need to specify what processes can make

structural changes to favour the target beneficiaries, and identify the indicators of them.

BDH, as one of the many rural development programs, is a process which leads to a rise in the capacity of the intended target beneficiaries to have greater control over their natural and social environment, accompanied by a wider distribution of benefits resulting from such control.

The following processes are important for enabling the target groups to achieve self-reliant development:

1. Effective improvements in resources and services available to the economically and socially weak target groups, including greater access to, and choices among, resources and services, and improved bargaining power.

2. Effective social gains which improve the way the target groups look at themselves and their environment, and improve the way they are viewed by other groups.

3. Organizations and participatory processes which allow the target groups to equitably share benefits, decision-making and project control.

4. Viable economic processes that are self-explanatory, and not decapitalizing.

5. Multiplier linkages and relationships that spread developmental processes beyond the confines of narrow target groups.

PART III

ORGANIZATION, ADMINISTRATION, MANAGEMENT OF BDH PROGRAM

1. GENERAL

This part is meant to provide BDH policy makers, decision makers, implementation programmers, and field executors with formative information needed in formulating, completing, and improving BDH

integrated project management system, coordination of functions and activities, cooperation and teamwork between field trainers and extension workers.

Experience shows that successful achievement of integrated and complex programs or projects depends greatly on available and potential resources mobilization, various technical expertise and technologies, all of which are to be made effective and efficient by application of appropriately acceptable and applicable organizational, administration, and management systems. Experience also shows that integrated rural development programs, such as BDH, face many problems and constraints both external and internal, have degree of achievement that vary from place to place due to influences of ever occurring environmental changes and initial local conditions.

The BDH manager's role and situation are typically characterized by complex designs, little control over the many actors involved in implementation, high expectations among target beneficiaries, uncertain technologies, variable socio-political climates, and to cap it all off the BDH project is usually in the spotlight i.e a constant flow of regional and natural dignitaries focus on every project dimension related to government policies concerning poverty elimination.

Other problems, that are to be dealt with by the BDH managers, result from the complexity of the integrated and comprehensive BDH strategy itself.

Example :

The interactive interrelationship between poor health conditions and inappropriate education and skills, low food production capacity, marketing system which is detrimental to producers, poor environmental situation within and without households, organizations whose infrastructures and facilities are much to be desired to meet actual needs.

Since this interaction of elements appears to reinforce poverty, then certain policies, approaches, strategies, techniques, tactics and technologies employed are to be made effective remedies for the total system and must be concerned with that total system so they alltogether are able to foster

positively interactive relationship between developing rural elements, based on their respective self-reliant qualities.

Such remedies are merely a balanced growth strategy. The combination of complexity and a need for balance among component activities makes BDH efforts extremely sensitive to organizational, administration, and management failings.

Organizational structures and management practices are obviously not the only factors affecting BDH implementation. However, most responses to any problem causes do have organization and management implications. Specific obstacles commonly identified in integrated rural development projects, especially those aimed at creating social and economic welfare of people who are burdened by internal and external pressures, are as follows:

* Built-in resistance to integration and coordination of BDH activities by participating agencies;
* Inability of project managers to effectively supervise and lead technical teams;
* Inadequate information to support project management decisions;
* Lack of incentives for projects staff or cooperating organization personnel to act in ways that support BDH objectives;
* Delays due to procurement bottlenecks;
* Diversion of project resources to other uses;
* Inappropriate use of technical assistance;
* Non-response to project initiatives by beneficiaries; and
* Activities which cannot be sustained after project resources are exhausted.

These problems, which are generally identified in integrated and complex rural development projects, are to be carefully taken into account and meticulously considered in project plan and design formulation.

1.1. Implementation Objectives.

During implementation, BDH program and project efforts resemble a sequence of intended changes, each of which is a management or policy objective.

The changes of policy and management objectives are usually called program's or project's "HIERARCHY OF OBJECTIVES" which are put in an orderly and logical sequence. The instrument used to display this logical sequence of objectives is called "LOGICAL FRAMEWORK". FIGURE XII shows an example of the logical framework for a 10-year BDH program.

When resources are channeled into a project area, they are converted into goods and services which can be used by the intended target beneficiaries living in that area. The use of these goods and services is expected to contribute to improved welfare.

FIGURE XIII shows the sequence of these objectives.

FIGURE XIII

SEQUENCE OF OBJECTIVES

RESOURCES ---> GOOD,SERVICES ---> RESPONSE ---> WELFARE

The focus is on those organizational arrangements and managerial practices that can help to alleviate the difficulties that arise during the sequence of turning resources into enhanced welfare. Such focus is appropriate for two main reasons:

First : Without a well defined boundary, any discussion of BDH will rapidly get out of hand.

Second : Due to the complexity of BDH and the difficulty of guiding such complex processes, organizational arrangements and management practices can be expected to have an important effect.

The organizational structure and arrangements and the management practices are to be dynamic following changes that will continuously occur during BDH implementation. If not, the organization and management will be static and do not have effective acceptability and applicability.

FIGURE XII

EXAMPLE
BDH PROGRAM LOGICAL FRAMEWORK
(ONE LOCATION, TEN-YEAR TIMEFRAME).

HIERARCHY OF OBJECTIVES	INDICATORS OF OBJECTIVES	VERIFICATION SYSTEM	ASSUMPTIONS
I.GOAL Sustained material and spiritual welfare of the intended target beneficiaries and forestry resources.	1. Infant mortality rate not higher than the national average. 2. Life expectancy not less than the national average. 3. Education year not less than the national average. 4. Purchasing power not less than relevant provincial avegare. 5. Equilibrium between forest covered area and non-forest land produces socially and economically healthy environment.	1. Sources of information: Kabupaten, technical and non-technical agencies' development annual reports 2. Methodology: a. Reports study. b. Field observation. c. Interviews.	1. National and provincial economic,social,political, and security stability. 2. Consistent protection of target group's rights and ownership against distructive and negative effects from external interventions.
II. PURPOSES. 1. Sustained equilibrium of economic structure.	Contribution to local disposable aggregate community income: a. Agriculture : 40% b. Village industry : 20% c. Services : 40%	1. Sources of information: 1.1.Branch offices of the Trade, and Manpower, Departments;Bureau of Statistics.	Market prices information system, marketing mechanism, sustained availability of purchased inputs are in place.
2. Sustained target beneficiaries' self-esteem and self-reliant capacities.	2.1.Equal share of decision making and policy making power related to the advancement of organizational and managerial authority between local governments and target beneficiary groups. 2.2.Access to technological information and financial sources of the target groups are appropriate. 2.3.Established mutual cooperative movement and bargaining power of the target groups.	1.2.Target group's organizations. 2. Methodologies: a. Reports study. b. Interviews.	Continuously and sytematically arranged education, technical skill training, and extension conducive to curiosity and dissatisfaction of past performances on the part of the target groups are undertaken by local technical and non-technical agencies, and by non-government institutions

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HIERARCHY OF OBJECTIVES	INDICATORS OF OBJECTIVES	VERIFICATION SYSTEM	ASSUMPTIONS
3. Sustained mutually cooperative efforts of all parties involved in, and associated with, forestry resources and environment development.	3.1. Reforestation and afforestation activities have been institutionalized as an integral part of local, area, and regional development. 3.2. Illegal forest products harvesting and shifting cultivation have totally been impossible due to public opposition.	1. Sources of information: a. National, provincial, distric Development Planning Boards. b. Regional Offices of Forestry Department, Provincial and District Forestry Agencies. 2. Methodologies: a. Report studies. b. Interviews. c. Field observation.	Enforcement of Forestry Agreement, Forestry Law and Regulations, Environmental law and Regulations are consistently undertaken, nationally.
4. Established area and regional development are able to totally prevent the emergence of new shifting cultivators and forest products harvesters.	Existing jobs and job-opportunities available in villages, areas and regions promise better earnings than illegal forest products harvesting and shifting cultivation.	1. Sources of information: Branches of Manpower Development Department. 2. Methodologies: a. Reports study. b. Interviews.	Consistent integrated and coordinated rural, area, and regional development planning and implementation systems are widely practiced based on understanding of their importance for effective, efficient use of resources, continuous and sustainable development of benefits.
III. OUTPUTS. 1. Established sedentary integrated farming systems that suit local agrocology, market demands; provide optimum profits to the target-group, and beneficial to their environment.	1. Local needs for food stuff, raw material for industries are well met. 2. Land rehabilitation and soil conservation are on integral part of farming practices. 3. Agricultural labour supply equals demand. 4. Net profit per land and time units is enough to meet non-food needs and accumulate assets.	1. Sources of information: Agricultural and industrial, land rehabilitation and soil conservation, agencies and institutions. 2. Methodologies: a. Reports study. b. Interviews. c. Field observation.	1. Coordination of functions, cooperation and teamwork between BDH's PMUs and local governments and technical agencies are continuous and sustainable in any aspects related to BDH program development. 2. Participatory and interactive decision and policy making between all technical, non-technical agencies and target beneficiary groups have been institutionalized as daily way of life.

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HIERARCHY OF OBJECTIVE	INDICATORS OF OBJECTIVES	VERIFICATION SYSTEM	ASSUMPTIONS
2.Established linkages between agricultiral industrial and services,sectors.	1.Choices of job opportunities are available. 2.Production value added increase. 3.By-products and waste products are profitably utilized to reduce production costs and enhance physical environment.	1.Sources of information: Branch offices of Manpower Trade, and Industry Departments. 2.Methodologies: a. Reports study. b. Interviews. c. Field observation.	3.BDH program/project is an integral part of local, area,and regional development program/ project. 4.Horizontal and vertical dissemination systems are consistenly applied.
3.Established settlement patterns and quality conducive to enhancement of economic,social,political, and secure life.	1.Natural and man-made hazards are minimum. 2.Life environment is healthy, secure, comfortable, and productive. 3.Settlements have become strong bases for well arranged area and regional development	1.Sources of information: Provincial and District Development Planning Boards, brach offices of the Public works Department. 2.Methodologies: a. Reports study. b. Interviews.	5.Technologies and field techniques' acceptability and applicability have been carefully field-tested through pilot, model and demonstration projects undertaken locally. 6.Infrastructures, facilities, utilities have been cooperatively made available by the BDH, local governments, technical agencies and target groups, and fully utilized.
4.Established insurace of physical,metal and social health.	1.Increasing decrease of physical morbidity cases,morbid imagination on the part of the target groups. 2.Preventive measures against diseases and malnutrition have been institutionalized.	1.Sources of information: Branch offices of Health and Social Departments. 2.Methodologies: a. Reports study. b. Interviews.	
5.Availability of formal, non-formal and informal basic educational and skill training institutions relevant to,and badly needed by the target groups for their social and economic advancement.	Properly educated and skilled labour force needed in the development of the primary,secondary and tertiary industries, are available.	1.Sources of information: Branch offices of Education and Culture and Manpower Departments. 2.Methodologies: a. Reports study. b. Interviews. c. Field Observation.	7.Various incentive such as broad prospects of job opportunities and better earnings, the fulfilment of local value systems,local prides and aspiration for local people, are in place.
IV.INPUTS.			
1.Availability of land.	Land is available for: 1.Integrated farming systems, at least one hectare for each target group household. 2.Housing and productive homeyard, at least 0.25 hectare for each target group household. 3.Economic, social, political/ administration, security, centres. 4.Economic and social infrastructures, facilities and utilities.	1.Sources of information: BDH's PMUs, Village governments, target group. 2.Methodologies: a. Reports study. b. Interviews. c. Field Observation.	1.Village governments, local tradition leaders, the Forestry Depatment, put aside land for BDH program activities. 2.Branch offices of the Nation Land Board publish land rights and ownership certificates. 3.Land used in BDH activities are recorded in local detail spatial plan documents.

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HIERARCHY OF OBJECTIVES	INDICATORS OF OBJECTIVES	VERIFICATION SYSTEM	ASSUMPTIONS
	5.BDH office,facilities field research and experiment plots (temporary) are in place.		
2.Availability of manpower / labour.	Manpower /labour available in adequate number for: 1.BDH program/project planning and technical designing, administration,monitoring and evaluation,reporting,within the HPH management organizations. 2.BDH's PMUs. 2.1.Managers. 2.2.Deputy managers. 2.3.Administration. 2.4.Treasurers. 2.5.Component managers. 2.6.Sub-component managers. 2.7.Field researchers: 2.8.Technical trainers: 2.9.Extension workers: a.Integrated farming: a.1. Food crops. a.2. Horticulture. a.3. Treecrops. a.4. Animal husbandry. a.5. Fishery. a.6. Land rehabilitation and soil conservation a.7. Post-harvest technologies. a.8. Home economics. a.9. Handicrafts,home and village industry management and organizations. a.10.Market information systems. a.11.Simple tools/instrument production techniques used in agricultural,industrial and household activities. b. Integrated Settlement: b.1. Construction of simple but healthy,comfortable, safe houses.	1.Sources of information: BDH's PMUs, participating local technical and non-technical agencies and institutions. 2.Methodologies: a. Reports study. b. Interviews. c. Field observation.	Relevant technical and non-technical agencies participating in the BDH program/ project development or in charge of rural / community, and underdeveloped village development projects are prepared to provide manpower qualified to deal with specific activities of the BDH.

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HIERARCHY OF OBJECTIVES	INDICATORS OF OBJECTIVES	VERIFICATION SYSTEM	ASSUMPTIONS
	b.2. Placement of houses in their respective and productive home gardens. b.3. Settlement unit spatial plan. b.4. Construction of road, drainage, and garbage disposal, systems. b.5. Land rehabilitation and soil conservation. b.6. Construction of greenbelts and open spaces. b.7. Organization and management of domicile target groups. b.8. Production technologies and techniques of simple, long-lasting, safe building/construction materials. c. Health and Nutrition: c.1. Techniques for in-house and out-house environment development. c.2. Simple menu planning, cooking and serving particularly for pregnant mothers, babies up to one year, 3 years of age; aged people. c.3. Herbiages and their respective benefits for prevention and cure of various ailments. c.4. Simple techniques and materials for maintaining and enhancing physical and non-physical health. c.5. Techniques for fostering intelligence, creativity and vitality of infants.		

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HIERARCHY OF OBJECTIVES	INDICATORS OF OBJECTIVES	VERIFICATION SYSTEM	ASSUMPTIONS
	d. Skill training of trainers and extension workers involved in activities listed in points 2.9. above.		
3.Availability of materials / tools / instruments.	Preferably: 1.Locally available and free of charge. 2.Easily available and within target group's financial capability, at local markets. 3.Easy to mand and operate.		
4.Availability of fund.	Enough for: 1.Undertaking all stages and processes of BDH program / project management system. 2.Applying corrective measures necessitated by negative effects of unplanned external and internal interventions.	1. Sources of information: BDH's PMUs, local government and technical and non-technical agencies, and institutions. 2. Methodologies: a. Reports study. b. Interviews. c. Field observation.	1.The fund needed for BDH projects is provided by the HPH's in accordance with the agreed upon budget plan. 2.Financial support are promised and provided by the local government budgets, INPRES of village,District, Provincial,other sectoral development projects, and the target groups.

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1.2. Integration And Coordination.

Those two terms, integration and coordination, are generally used with exuberance in many integrated rural development projects, sometimes to hide a lack of understanding of the practical issues involved.

a. Integration.

The principal difference between an integrated organization as opposed to a functional is indicated by the level where authority over the full range of organizational activities converges. In a functional organization it occurs near the top. In an integrated organization, on the other hand, convergence occurs closer to the bottom of the organizational hierarchy.

Example :

In the BDH, which is an integrated rural development, engineers, agriculturalists and medical personnel may all be accountable to a single project manager headquartered in a location closest to the project site /PMU manager.

Integration denotes structures and implies comprehensiveness (a multi-sectoral focus) and control (direct lines of authority).

b. Coordination.

Coordination, on the other hand, describes the type of managerial behaviour required to produce the results visualized in the project design. The word itself provides a clue to the behaviour it describes: "Co" suggests joint or shared activities, and "ordination" implies the ranking of these activities.
This ranking refers to the timing, type, quality and magnitude of resources applied, and goods or services produced. It also includes the distribution of implementation of responsibilities. The joint effort refers to sharing resources and information to guarantee the needed mix of goods and services.

To apply multi-sectoral resources to the BDH objectives either integration or coordination strategies can be used, or both simultaneously.

1.3. Goods and services delivery.

Organization and management factors affect the integrated delivery of goods and services to the target beneficiaries. Problems associated with information, human resources, material resources and technical assistance should be solved through the formulation of organizational structure and management practices or responses.

1.3.1. BDH management organizational structure.

The BDH management organizational structure is determined by the functions that are to be undertaken by each level of the organizational hierarchy, and not the other way round. The functions borne by the top management will clearly be different from those borne by the lower level management. Considering that the organizational structures of the forest concession rights enterprises held responsible for the BDH program implementation are different from those of the Ministry of Forestry who are, in the context of BDH, to serve as policy and decision-makers, evaluating, monitoring, supervising, and correcting measures formulating authorities, it is then necessary that functions of each level within the BDH management organization are to be clearly determined. FIGURE XIV shows the distribution of those functions.

There are least three considerations to be seriously taken in choosing the management organizational structure of BDH.

<u>First</u> : The organizational level where integration is to occur.

<u>Second</u> : The appropriate person or institution as a host for integration.

<u>Third</u> : The configuration of internal organizational divisions to be established.

Each choice involves trade-offs. The choice of level should be based on project's priorities and the advantages of centralization versus decentralization in the local context. The selection of the host organization should be based on a combination of the local situation and project objectives. The internal organization should be based on technical / support needs and the intended target group.

When two separate clientele groups are served by the same unit, the levels of conflict and confusion are raised and management is more difficult. A successful way to improve this situation is to assign

responsibility for each target group to different units.

Example:

One agricultural extension team should concentrate on services to food crop farmers, where as a second team should serve industrial tree smallholders. This allows each group to concentrate on the particular needs of its clientele, and lowers conflicting demands on the strategy, time, and limited resources of each unit.

FIGURE XIV

FUNCTIONS OF BDH MANAGEMENT ORGANIZATION

FOREST CONCESSION RIGHTS HOLDERS/HEAD QUARTERS

1. Formulation of the long-term BDH development plan as an integral part of the long-term forest exploitation plan referring to the Ministry of Forestry's Decree and the second Long-Term National Development Plan. Determining general policies, approaches and strategies for the achievement of the stipulated long-term BDH's hierarchy of objectives.
2. Integration of the BDH organizational policy issued by the Director General of Forest Utilization, and the BDH implementation policy issued by the Director General of Reforestation and Land Rehabilitation into the BDH general organization, administration and management systems.
3. Determining general guidelines for five-year and annual BDH development plans formulation.
4. Evaluation of five-year and annual BDH development plans proposals submitted by the HPH branch offices and deciding those proposals as formal plans.
5. Determining general implementation directives for annual BDH development plans.
6. Provision of resources (manpower, fund, material, operational equipments, facilities, infrastructures) for five-year and annual BDH plans formulation and BDH implementation.
7. Submittance of BDH performance reports and place themselves accountable for BDH achievement to the Ministry of Forestry.

BRANCH OFFICES OF HPH ENTERPRISES

1. Formulation of five-year BDH development plans as an integral part of five-year forest exploitation plans using the existing long-term BDH plan and local government development plans as

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reference. Determining BDH policies, approaches and strategies taking into consideration locally specific characteristics in formulating hierarchy of objectives.

2. Integration of evaluation systems and control plans and schedules of the regional offices of the Ministry of Forestry, monitoring systems and supervision plans and schedules of the Provincial Forestry Agencies into the BDH detail organization, administration and management, systems.

3. Determining detail guidelines for annual BDH development plans formulation.

4. Evaluation of annual BDH development plan proposals submitted by BDH's PMUs, formulation of corrections, and submittance of the improved annual BDH development plan proposals to the HPH head-quarter for approval.

5. Determining detail implementation directives for BDH project implementation complete with instruments needed in monitoring, evaluation and making monthly, quarterly and annual reports on project achievement and progress.

6. Assistance for timely availability of resources in accordance with planned volume and quality.

7. Periodic evaluation of project development using criteria, and monitoring of project development progress using standards, of achievement as references.

8. Serving as liaison between HPH top management and Regional Offices of Forestry Department, local governments, provincial and district technical and non-technical agencies, universities, and non-government organizations related with BDH activities.

9. Establishing integration of BDH activities with other local development activities, coordination of functions, cooperation and teamwork in BDH project planning and implementation with local technical and non-technical agencies / institutions.

10. Submittance of BDH performance reports and place themselves accountable for BDH projects' achievement undertaken within their working areas to HPH top management.

BDH's PMUs
1. Formulation of annual BDH development project proposals as an integral part of the annual forest exploitation plan using the five-year BDH development and five-year local government development plans as references. Determining policy approaches, strategies, field techniques and tactics, and technologies; organization administration, management systems, taking into account locally specific characteristics to achieve the stipulated hierarchy of objectives, submittance of the annual BDH plan for approval of the manager of the branch office of HPH enterprise.
2. Determining detail directives for the formulation of each of the BDH project component, and provision of fund for this activities.

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3. Evaluation of BDH project components' development plans proposed by their respective sub-unit manager, making corrections, and deciding proposed project components proposals as definite component plans.

4. Determining operation directives for each component complete with instruments needed in monitoring, evaluation, and making monthly, quarterly and annual reports on component progress and achievement.

5. Improvement of available resources utilization effectiveness and efficiency by establishing inter-subcomponent linkages.

6. Supervising monitoring, evaluation and controlling BDH project implementation, most particularly its components.

7. Disseminating the underlying train of thought of the BDH program to all parties involved in planning, implementation; operation, maintenance and development of BDH outputs.

8. Serving as liaison between BDH project management and agencies whose tasks and functions are closely related with BDH's.

9. Serving as field research agent in pilot, model and demonstration plots of BDH as preparation for diffusing and generalizing BDH's successful activities, benefits and empirical experiences.

10. Serving as an institution of skill training and extension for the intended, desired and potential target groups.

11. Serving as an institution that produces agents of development and change from among local BDH participants who have acquired specific technical knowledge and skill, respect, trust and credibility by the intended target groups.

12. Assistance in founding and establishing target group organizations, and in making them acquire self-esteem and self-reliant capacity.

13. Arrangement of systematic technical and non-technical skill training courses for field extension workers.

14. Submittance of BDH performance reports and place themselves accountable for the BDH project achievement undertaken in their working area to the branch office manager of HPH enterprise.

BDH's PROJECT MANAGEMENT SUB-UNITS

1. Formulation of annual project component development plan proposals using annual BDH project plan taking into consideration available resources, actual needs of the target groups, specific characteristics of the target groups such as dominant motifs and social and economic life priorities; economic, social, technological, and physical environmental elements and their respective functions.
Submittance of the component development plan proposals to the PMU for approval.

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2. Provision of component implementation plans and schedules taking into account the existing available number and quality of skill trainers and /or extension workers, material, operation equipment and tools, and fund.

3. Provision of operation directives for every skill trainer and/or extension worker who are to deal with planned sub-component, complete with instruments needed in monitoring, evaluation, monthly, quarterly and annual reports.

4. Provision of special instruments for reports on positive and negative empirical experiences, problems, constraints, corrective measures both successful and unsuccessful, positive and negative effects of subcomponents on economic, social, political and environmental aspects, positive and negative effects of unplanned external and internal interventions.

5. Provision of techniques for transferring knowledge, skills, technologies, innovations of BDH to the intended, desired and potential target beneficiaries through well arranged action-training, group discussions, group meetings attended by domicile and field groups.

6. Establishment of linkages between BDH subcomponent activities with activities of non-BDH projects within the working area of the BDH.

7. Coordination of BDH sub-components activities with similar activities of non-BDH projects operating in the same area to avoid duplication and replication of activities causing inefficiency of resources used.

8. Provision of assistance for the target groups in founding and establishment of their functional organizations.

9. Utilization of existing target group organizations for knowledge, skill, empirical experience and technology transfer; for new ideas collection; participatory and interactive decision making processes establishment and institutionalization; fostering self-reliant capacities and self-help capabilities; and for creating believable and trustworthy development agents and agents of change.

10. Utilization of communication media as tools for dissemination of BDH initiatives to the neighbouring areas to facilitate adoption of BDH activities at their own expenses.

11. Submittance of BDH component performance reports and place themselves accountable for the component achievement to the PHUs.

INFORMAL LEADERS

1. Horizontal dissemination of BDH message, recommendations, initiatives, technologies, experiences, activities and benefits through tangible examples undertaken by the informal leaders themselves or by his domicile or field groups where their positions may be members or leaders.

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2. Presenting to, and discussing with, BDH's PMU or sub-unit managers the opinions and responses of the target groups concerning BDH messages, recommendations, initiatives, technologies, goods and services delivery system, management information systems, actual effects of BDH activities, project personnel behaviour and quality, problems and constraints; target group's aspirations, ideas, and proposals for betterment.

3. Representing, in name or on behalf of, the target groups in formal meetings held either by the BDH managers or government agencies.

1. If organizational units are based on clients with common economic interests, rather than geographic or ethnic interests, they will be more effective at delivering services.

2. If organizational units are matched to clientele groups or environmental support organizations, on the one hand, and to technical functions, on the other, then problems arising from improper organization will be minimized.

3. If there is one deputy PMU manager responsible for internal management, then the project manager can concentrate more effectively on external relationships.

The potential tradeoffs between integration at high or low level organizational levels are shown in FIGURE XV.

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FIGURE XV

STRENGTHS AND WEAKNESSES OF CENTRALIZATION AND DECENTRALIZATION

	CENTRALIZATION	DECENTRALIZATION
STRENGTHS	1. Increases speed of decision with routine decisions and certain technologies; 2. Allows appropriate incentive system to affect focal organization and linked organizations; 3. Raises probability that a controvertial policy will be implemented; 4. If an organization is both autocratic and centralized, change can be readily introduced; 5. Top level administrators have longer tenue, and decisions made by them about linkages with other organizations tend to produce more valuable interactions; 6. Improves high level morale and initiative.	1. Increase speed of decision with non-routine decisions and uncertain technologies; 2. Participative, decentralized and autonomous organizations are more productive, efficient and satisfying; 3. Decentralized decision making and multiple communication channels facilitate inter-organizational cooperation; 4. Although the direct power in the hands of national leaders is reduced, decentralization increases their ability to guide society by creating more communication links with it; 5. Improves low level moral and initiative; 6. Nourished leadership; 7. Facilitate client participation.
WEAKNESSES	1. Overloads communication systems and requires more infrastructures /resources than decentralization to produce decisions in a given time; 2. Changes cannot be readily introduced into a bureaucratic centralized organization; 3. Does not nourish leadership; 4. Sensitive to situations where national level elite is not sympathetic to client group.	1. Requires highly developed informal communications channels; 2. Without financial discretion at lower levels, decentralization strategies will not work; 3. A wide range of goals facilitates decentralization; 4. Very difficult when inefficient disbursement systems exist; 5. Often requires a program element designed specifically to improve lower level planning capability among those charged with implementation; 6. Sensitive to situations where low level elite is not sympathetic to client group.

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It should be remembered that although integrated BDH development implies a more decentralized strategy, the choice of level is not independent of the choice of the forest concession rights holders themselves.
FIGURE XVI shows the tradeoffs between various alternatives and suggests conditions which support it.

FIGURE XVI

ORGANIZATIONAL PLACEMENT ALTERNATIVES AND TRADE-OFFS

NO.	ALTERNATIVE	TRADE - OFFS		SUPPORTING CONDITIONS
	IMPLEMENTOR	MAJOR ADVANTAGES	MAJOR DISADVANTAGES	
1	2	3	4	5
1.	HPH TOP MANAGEMENT. (Permanent).	1.Provides a base in a permanent institutions; 2.Provides high level decision involvement; 3.Sometimes appropriate for non-area focused projects; 4.Often simplifies initial preparation process and resources flow.	1.Limits sectoral focus of project strategy; 2.Often there is a preoccupation with top level problems rather than local variations; 3.An unwillingness to delegate significant operational authority is common; 4.Often accompanied by jealousy of other divisions of the HPH management organization.	1.High capacity in appropriate agency; 2.High priority on institutionalizations; 3.Agency has high target group orientation; 4.HPH holders commitment critical for BDH success.
2.	BRANCH OFFICE OF HPH MANAGEMENT ORGANIZATION. (Permanent, such as region, province, district).	1.Provides local focus; 2.Sometimes helps to concentrate authority over project activities; 3.Can build planning and implementation capability in permanent entity.	1.Often has low institutional and human resource capability; 2.Branch office of HPH management organization often have little leverage over local government and technical agencies whose activities affect BDH.	1.High complement to decentralization; 2.Uniqueness of target area; 3.High capability in appropriate agency; 4.Agency has high target group orientation.
3.	SPECIAL ORGANIZATION WITHIN BRANCH OFFICE OF HPH MANAGEMENT ORGANIZATION CHARGED WITH BDH PROGRAM MANAGEMENT.	1.Helps comprehensiveness of project overviews; 2.Provides local focus with access to higher level authority;	1.Branch offices's sub-division competition can cripple BDH performance; 2.Complex communication needs.	1.Good history of inter-subdivisional cooperation; 2.Technologies sensitive to lack of complementary inputs;

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NO.	ALTERNATIVE	TRADE - OFFS		SUPPORTING CONDITIONS
	IMPLEMENTOR	MAJOR ADVANTAGES	MAJOR DISADVANTAGES	
1	2	3	4	5
	(Permanent, specifically founded for managing BDH program/projects within a province/region).	3.Can avoid overly oppressive audit and control pressures.		3.High capability in appropriate organization sections; 4.High target group orientation sections.
4.	BDH PROJECT MANAGEMENT UNITS. (Temporary, autonomous for managing site projects).	1.Can be used to concentrate authority in project area; 2.Familiar to technical and non-technical personnel; 3.Facilitates integration and coordination of sectoral activities through appropriate teamwork; 4.Can avoid oppressive audit and control procedures;	1.Very difficult to institutionalized; 2.Temporary nature creates personnel management problems.	1.Environment hostile to target groups; 2.Simple infrastructure focus; 3.Standard operating procedures very cumbersome; 4.Technologies highly uncertain.

Taking into consideration the BDH management organizational functions; strengths and weaknesses of centralization and decentralization of authority to integrate and coordinate BDH activities; advantages, disadvantages, and supportive conditions of organizational placement alternatives and tradeoffs, the BDH management organizational structures of the top, middle and lower levels are proposed. FIGURE XVII shows the general and overall BDH management organizational structure together with its functional relationships; FIGURE XVIII show the top level BDH management organizational structure; FIGURE XIX shows the middle level; FIGURE XX shows the lower level, and FIGURE XXI shows the field level, BDH management organizational structures.

Organizational structures relate closely to functions that are to be met, and the latter relate to BDH activities. It should be remembered that the long-term BDH program comprises comprehencive and overall activities, each five-year BDH comprises certain BDH activities having highest leverage in that particular development timeframe for those comprised in the next five-year BDH program; each annual BDH project comprises activities having highest leverage in that particular year for those comprised in the next annual BDH project.

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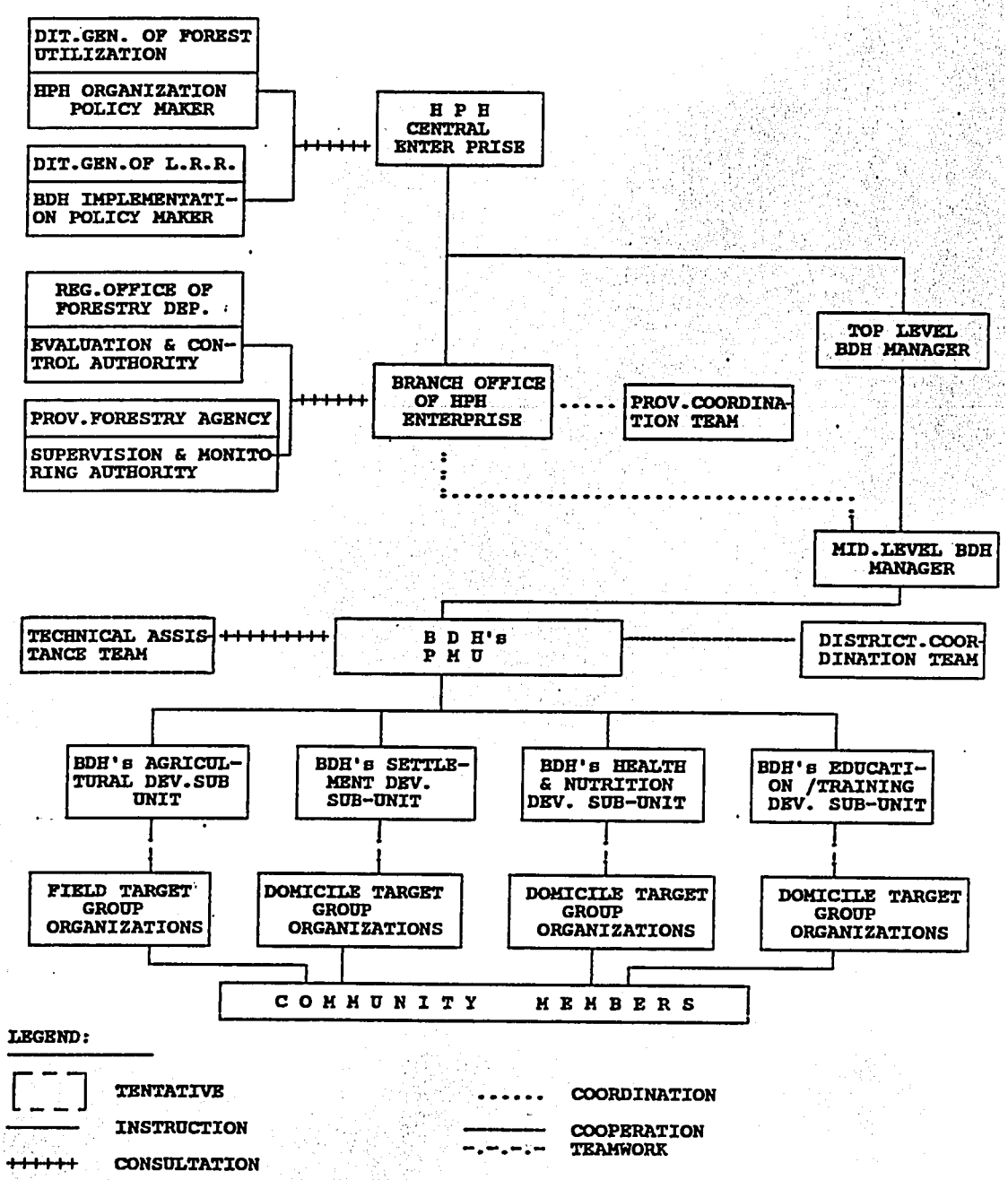
FIGURE XVII
GENERAL /OVERALL BDH MANAGEMENT ORGANIZATIONAL STRUCTURE AND ITS FUNCTIONAL RELATIONSHIP



LEGEND:

- TENTATIVE
- INSTRUCTION
- CONSULTATION
- COORDINATION
- COOPERATION
- TEAMWORK

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FIGURE XVIII
TOP LEVEL BDH MANAGEMENT ORGANIZATIONAL STRUCTURE

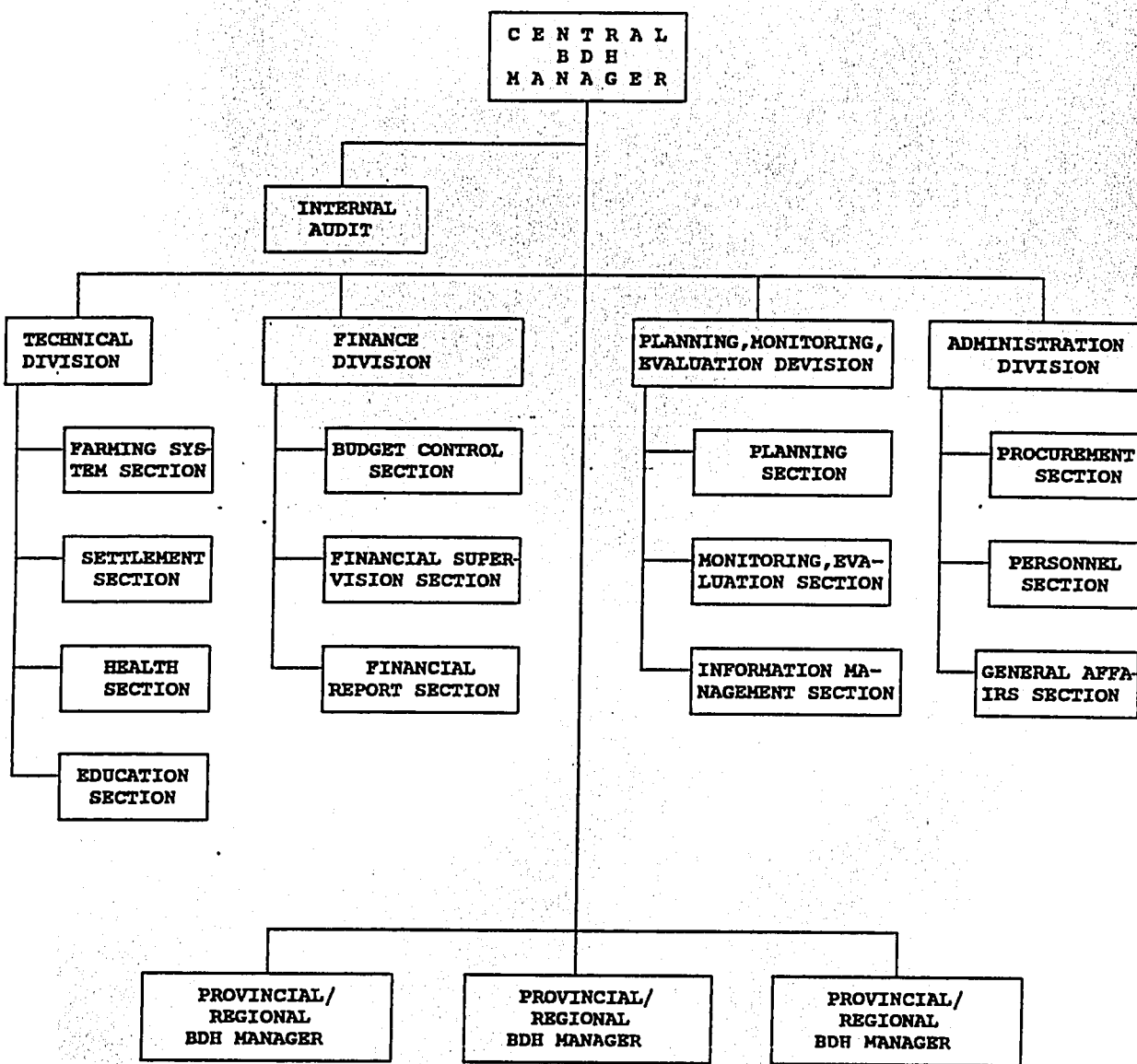

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FIGURE XIX
PROVINCIAL /REGIONAL /HPH BRANCH OFFICE LEVEL BDH MANAGEMENT ORGANIZATIONS STRUCTURE

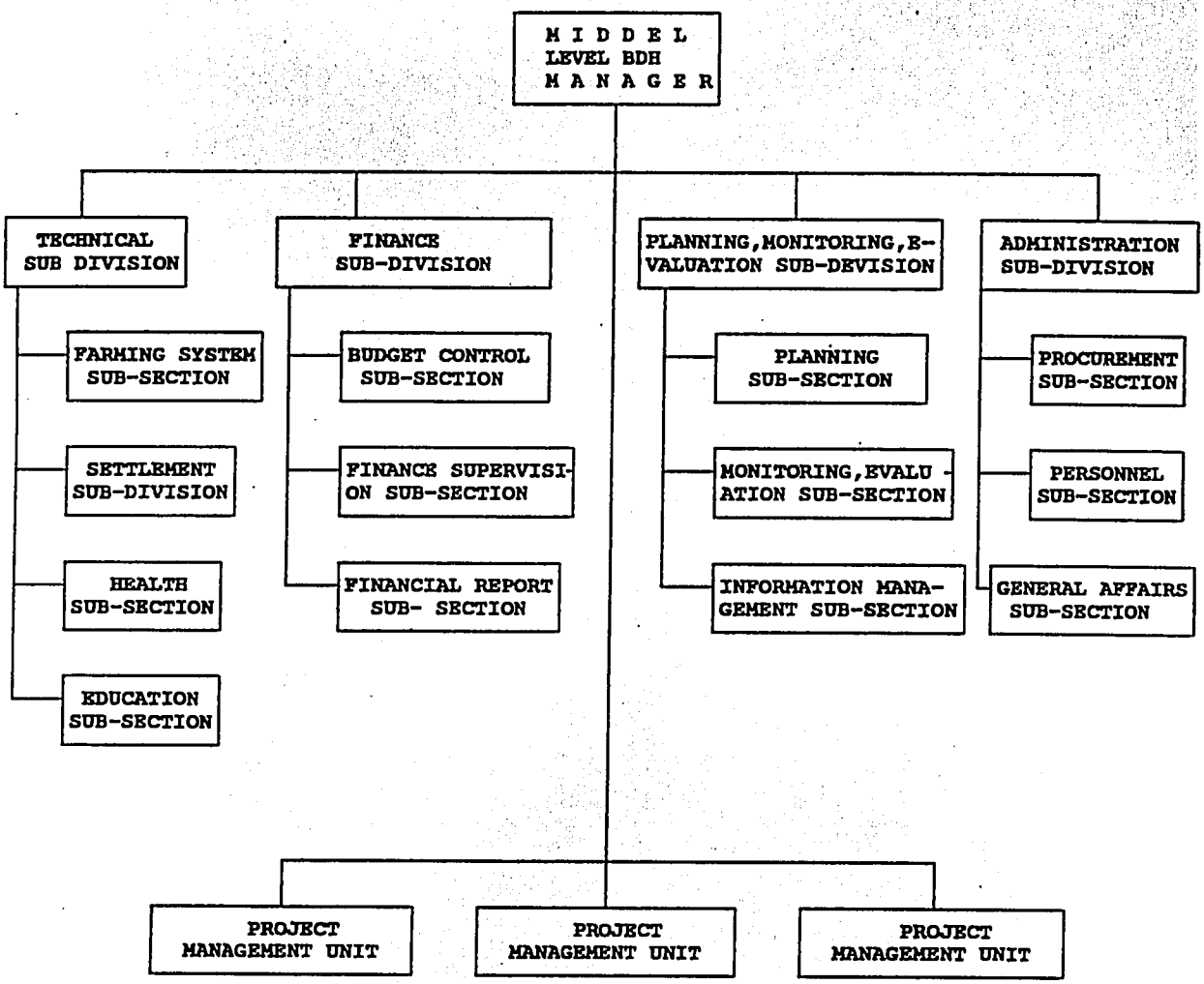

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FIGURE XX
BDH PROJECT MANAGEMENT UNIT ORGANIZATIONAL STRUCTURE

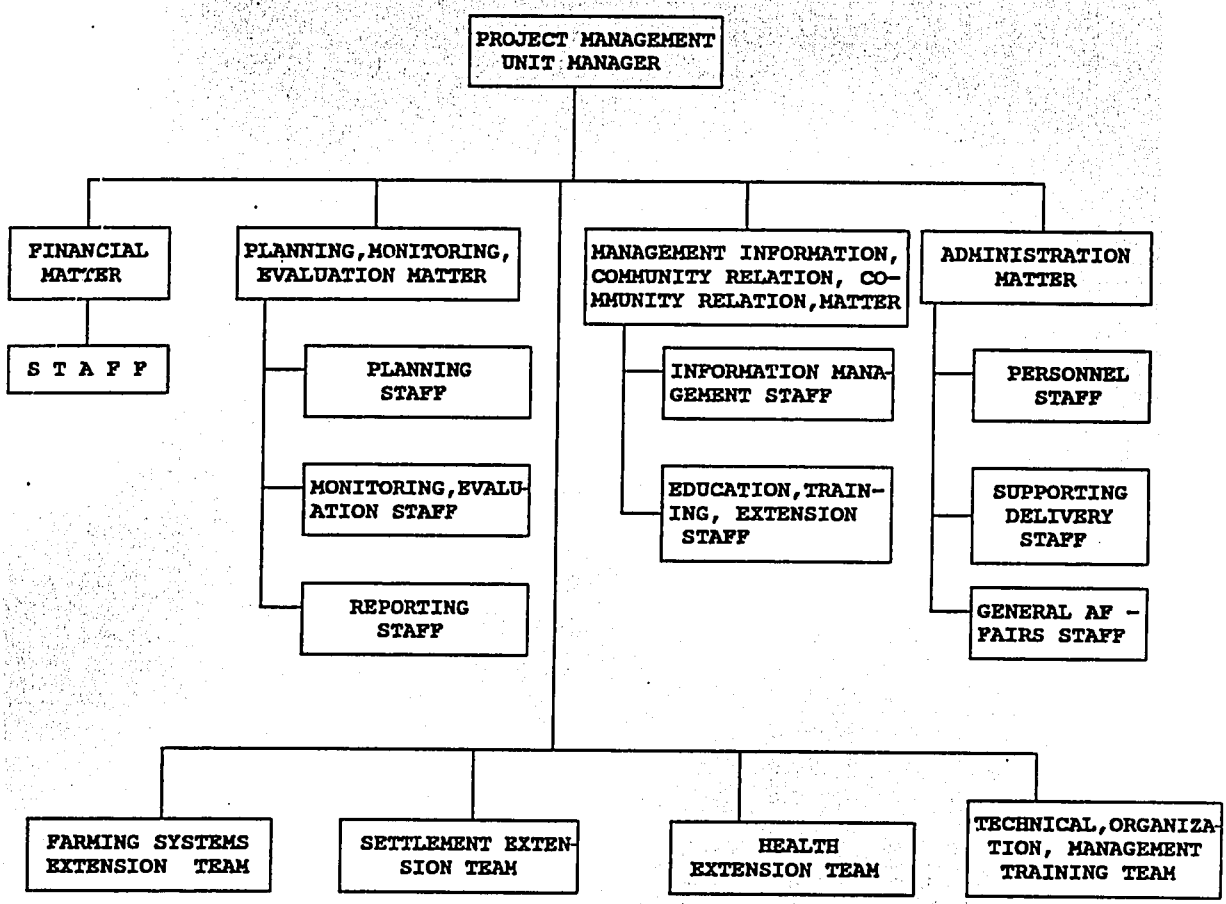

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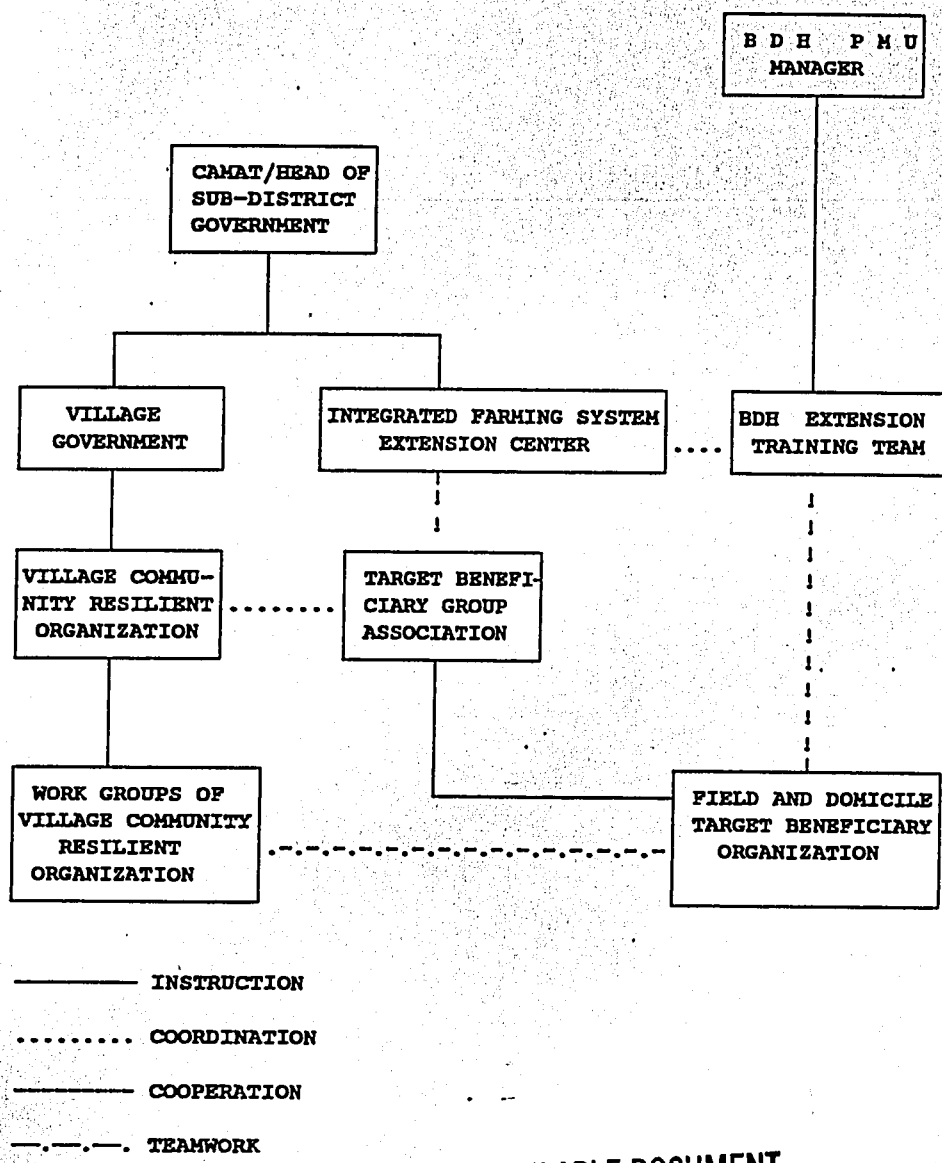
FIGURE XXI
FIELD LEVEL FUNCTIONAL RELATIONSHIP BETWEEN BDH ACTIVITIES IMPLEMENTING INSTITUTIONS



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Based on these train of thought, the BDH management organizational structures should be flexible and dynamic in accordance with the functions each have to perform which are related to BDH activities at a certain timeframe. The figures show the BDH management organizational structures if all components, subcomponents, and activities are simultaneously undertaken within a certain timeframe. If the range and scope of activities are small, several functions could be undertaken by one person, but the functions remains.

1.3.2. Liaison strategies.

Due to the complexity of BDH designs and the need for coordinated operations, liaison roles are often established. There are five strategies known to establish liaison roles.

First : **A commitee is founded and given the function.**

Second : **The function is assigned to an individual position.**

There are advantages and disadvantages to both approaches. Individual liaison positions are often caught in the middle, with no authority to make decisions and no independent resource base.
Committees, however, may also be composed of members without authority to make commitments. Consequently, liaison roles often lead to information sharing without resource-sharing.

Third : **Promoting coordination through provision of budget funds for extemporaneous, temporary task forces to help solve problems.**

Such task forces can be technical (central HPH enterprise's engineers temporarily in the field redesigning irrigation systems subcomponents in BDH) or managerial (organizational development specialists working with field staff to improve communication). Task forces may be composed of permanent HPH and /or BDH staff, short term consultants, or a combination of the two. The success of the task force efforts is dependent on the involvement and commitment of those who

will have the tasks of implementing the resulting recommendations.

Fourth : **Establishing dual reporting requirements for example : staff in a land rehabilitationsubdivision may report to both the provincial BDH manager and the Center of Land Rehabilitation of Soil Conservation.**

Theoretically, this provide strong link between cooperating organizations but it may become a source of difficulties rather than a workable solution. The determination of a reporting format, and the resulting paperwork burden can produce diversion of energy, decrease performance, and friction. This is true in interagency setting using coordination strategies and in locations with a history of interorganizational conflicts.
As an internal liaison strategy within an integrated PMU, this approach is useful.

Fifth : **The use of management methods rather than organizational relationships.**

Such techniques as logical framework analysis, action diagrams, organizational functions coordination, organizational responsibilities distribution, etc, can be used as a focus for joint planning among cooperating staff within the organization, or cooperating agencies within project management organization. Periodic meetings and discussions, on-site and off-site training program also fall into this category. All these methods have provided positive results in complex and integrated projects such as the BDH.

1.3.3. Information Systems.

Based on field experiences, some useful guidelines for information systems have been found. Stages suggested for developing information systems are as follows:

a. Be sure that there is really a need for something different from what is ongoing.

To achieve effectiveness and efficiency of resources used in data /information collection:

a.1. Never undertake any new - data collection efforts:

* without an inventory of what formal and informal data already available;
* without knowing what information decision and policy makers are currently using;
* without specifying how each piece of information is to be used.

a.2. Never collect any information until the costs of collection and analyses have been budgeted.

b. After aspects stated in point (a) have been established, determine:

b.1. The decision and policy makers in need of information; and
b.2. Information needs in the context of their potential use by each decision or policy maker.

c. A final precaution:

Make designs flexible enough to redefine both the data to be collected and the analytical tools to be applied to them.

When developing information systems, external information flows and organization structures ought to be taken into account. If this is not done, the information collected may not be able to help BDH achieve its objectives.

Example I:

Having an agricultural extension worker both disseminate information and collect credit payments. This a faulty design. In such a case, the efforts to deliver and transfer information and technologies will fail because community members will not know which function the extension worker is performing. In this situation, the most prudent

course for a delinquent debtor is to avoid contact. The effect on project performance and two-way communication will definitely be detrimental.

Example II:

Having an irrigation gate keeper collect data of production rate of rice per land unit of sawah /irrigated ricefield. The data are not directly related with his daily tasks and functions, hence the data collected may be incomplete and of low validity.

Specific propositions about information system design and use include the following:

* **An information system that is able to provide simple, useful and reliable data will be able to manage staff conflict and deliver goods and services;**

* **Simple information systems that directly channel data from a problem source to a decision maker with the power to affect the problem, will be used more, and be more influential. Complex reporting formats and systems that filter data through multiple organizational layers to actors removed from direct interest in the problem, will be less effective.**

* **If the target beneficiary groups are part of two-way information flows, the BDH project will be more likely to deliver the appropriate mixes of goods and services to them.**

* **If the BDH project administrators know how decisions are made within cooperating organizations, they will be more able to coordinate the activities of those organizations.**

1.4. Supervisory Management Behaviour.

Many complex and integrated rural development projects, such as BDH, have not been able to produce satisfactory results and have caused their respective target beneficiaries

very dissapointed only due to improper management behaviour. This inappropriate behaviour compound implementation difficulties by producing defensive, arrogant, or even secretive behaviour from those who fear that their lack of management expertise will be discovered.

The more complex the project, the better management capabilities and skills are to be.

Examples of effective management practices are as follows.

1.4.1. **Joint planning exercises using participatory and interactive decision making techniques improve service delivery, identify contingencies and increase staff satisfaction.**

When carrying out a task, a two-way communication is needed to identify changes in the environment and provide feedback to both the supervisor and the implementor. Management experience suggests the following findings:

1.4.2. **Successful managers view management as a bargaining process and use reciprocating exchange relationships rather than seeing it as a strictly rule enforcement process.**

1.4.3. **Managers who apply informal processes to develop decisions or concencus and afterward use formal mechanism (such as meetings or letters) to announce the decisions will encounter less resistance in implementing those decisions than those who use formal channel to develop them.**

1.4.4. **Managers who are able to create a win-win rather than a win-lose definition of a situation are generally successful in resolving conflicts.**

1.4.5. **Managers who defend the interests of their staff encourage both performance and loyalty.**

Managers owning those characteristics will be able to improve their achievement if they consistently take into account cultural values and organizational settings. A more participatory management style is definitely necessary in BDH's PMU organization in contrast with a traditional line organization that requires less involvement to achieve similar results.

1.5. Technical Assistance Management.

During the initial implementation stages of the integrated, comprehensive and complex BDH program, all parties involved in, and influenced by, BDH activities, may have not acquired appropriate technological, technical, and managerial

knowledge, skill, and empirical experiences, needed to achieve successful results. In this situation technical assistance may be useful.

There are generally four major problems associated with the management of technical assistance i.e:

a. The size and nature of the existing talent pool severely restrict long-term strategies;

b. Project designs do not consider changing technical assistance needs during the life cycle of complex and integrated projects;

c. The type and amount of short-term assistance needed during implementation is often under-estimated during design, and available assistance is rarely used effectively; and

d. Many technical teams do not function with a common approach and mutually supportive activities.

To lessen the effects of these problems, the following four guidelines are suggested:

1.5.1. Strict addherence to high technical competence should not be at the expense of personal flexibility because it will lower staff effectiveness;

1.5.2. The trade-offs between a long-term, limited technical team and a short-term flexible mix of technical assistance personnel should be carefully considered during design;

1.5.3. Short-term consultants should use concensus building to establish commitment that can be used by BDH project management staff after their assignment termination date; and

1.5.4. Technical assistance teams should have home office bases situated close to BDH sites. Each have a permanent staff who serves as team leader.

The major strategies for providing long-term technical assistance are described in FIGURE XXII. Both strengths and weaknesses are noted in it.

FIGURE XXII
TECHNICAL ASSISTANCE STRATEGIES

TYPES OF TECHNICAL ASSISTANCE	STRENGTHS	WEAKNESSES
Personal Contract : "The Individual Strategy"	1. Low cost. 2. Low profile. 3. Allows specification of known individuals.	1. Limited recruiting pool for individual specialists. 2. Isolation from new approaches to development. 3. Unwillingness for short-term contract. 4. Difficult support services (insurance, retirement). 5. Do not much help increase capabilities of BDH staff.
University Contract: "The Academic Strategy".	1. Link to research network. 2. Can improve quality of development studies program. 3. Field team has permanent base.	1. Can be dumping ground for poor faculty. 2. Reward system may support research but not action. 3. Usually inexperienced in real field practices. 4. High cost. 5. Not easy to deliver short-term technical assistance.
Private Firm Contract with only temporary staff "The Bodyshop Strategy".	1. Allows specification of known individuals. 2. Builds "talent search" capability in local organization. 3. Does not require strong capability from HPH and BDH management organizations.	1. Temporary staff handicaps field management. 2. Lack of empirical experience or knowledge of BDH management system. 3. Firm organization tries to cut cost and provide minimum support. 4. High cost.
Private Firm Contract with permanent team leader who cooperate closely with BDH managers: "The Management Team Strategy".	1. Link to information networks. 2. Facilitates field managers. 3. Facilitates shortterm technical assistance 4. Firm accountability for contract provides incentive to do job.	1. High cost. 2. Long communication and supply lines. 3. Requires strong firm with knowledge and competence in development. 4. Adds another actor into the development assistance project. 5. Does not much help BDH managers develop their organizational capability.

Point 2 of Part II shows that the link between BDH resources and service delivery has many problems, some of these problems can be minimized by appropriate organizational structure and managerial practices.

Common organizational failings are:

a. A tendency to design projects with fragmented authority, a dependence on a wide range of resources controlled by a big number of organizational units, very complex coordination requirements, multiple functions combined in single roles;

b. A tendency to provide long-term technical assistance which is independent of an organizational base and neither answerable to, nor supported by, a home office.

Common managerial failings are:

a. Using ineffective supervisory and programming practices;

b. Basing decisions on data and criteria which are not useful for providing goods and services to BDH target beneficiaries;

c. Paying to little attention to the intra-organizational dynamics which often determine the limits of coordinating the efforts of independent organizations.

The weaknesses of the organization and management are exacerbated by social, economic, environmental changes and inter-institutional conflicting interests. Other problems to pay attention to are the appropriate hierarchy of objectives of the long-term, five year, and annual BDH plans which should be responsive to the real needs of their respective target groups.

2. LOCAL RESPONSE.

The BDH project is not likely to succeed without appropriate local responses to its development initiatives. The nature, kind, form, magnitude, timing and duration of the responses will vary from place to place and from time to time, but those responses are

fundamentally the adoption of new technologies or resources commitment to achieve BDH development objectives. A serious problem in implementation is the frequent failure to elicit such responses badly needed at the every stage of the management i.e. timely provision of various inputs, conversion of inputs into outputs; operation, utilization, maintenance and development of outputs: dissemination of BDH activities and benefits, horizontally and vertically.

2.1. Reasons for low Response.

Three categories of factors inhibit the BDH target groups' response to BDH initiatives.

First : **The national BDH policies. These are the most sensitive but the least amenable to control by project designers or managers.**

Second : **Environmental constraints immediately related to BDH activities. These are, to a certain extent, amenable to modification.**

Third : **Inappropriately designed BDH initiatives. These are seemingly the most capable for correction.**

Inappropriate national policies often result in a lack of integration of the poor target groups into the cash economy, an emphasis an exportable crops, minimum wages and pricing policies that discriminate against rural economics and rural people. But, it does not follow that a macro policy should be changed just because it causes problems to the BDH. Micro policy judgments are based on other factors as well.

The capacities of the rural poor to respond to perceived problems and to BDH resources made available to them, depend on the constraints imposed by local social and physical factors. Seasonal change, most oftenly, reinforces these factors. Due to the fact that environmental factors constitute constraints to local response, the BDH managers are to have proper understanding and flexibility in project management.

Ill-conceived BDH initiatives are caused by:

a. Failure to adequately consider the nature of the poor target group's perceptions of risk;

b. Excessive project administration and technical complexity;

c. Benefit packages which satisfy HPHs themselves rather than local perceptions of need.

2.2. Supporting Response.

There are, basically, three administrative or support delivery orientations loward local response.

First : **To do nothing.**

This option is equal to delivering BDH goods and services with welfare improvement orientation. This is a common, unjustified effort to foster a leap of faith of the receivers to the BDH managers.

Second: **To temporarily offer overwhelming incentives to induce target group's response which is desired by the giver.**

This option, indeed, can lead to impressive economic growth, but it falls short of authentic development on ground of both equity and sustainability.

Third : **To seriously consider local response by developing organization and management strategies to support it.**

Two particular mechanisms i.e. local organization and participation, are widely suggested as elements of this third option.

The strengths and weaknesses of those techniques are discussed as follows:

2.2.1. Local organizations.

Local organizations range from functional groups such as small upland /lowland farmer organizations, small local farmer marketing cooperatives, social and religious organizations. There are also many local formal and non-formal community organizations the founding of which are based on government instruction and sponsorship such as Village Resilient Organizations, Village Unit Cooperatives, neeghbourhood associations, family welfare movement, etc. The degree of performance and conditions of these organizations varies, but even the most static local community organization can be a precious asset for local development purposes if the approaches, strategies, organization, administration and management systems applied are appropriately suited to local needs and capacities.

Local organizations can play potentially positive roles as vehicles for:

a. Establishing two-way information flows which provide technical information and management, support those individuals who are willing to apply new approaches, technologies, tools; and break down barriers between groups or individuals;

b. Minimizing risk and practicing economics of scale;

c. Adopting BDH activities to local conditions;

d. Marshalling local resources;

e. Achieving local political and economic independences; and

f. Coordinating and spreading the benefits of outside assistance.

Beside those potentially positive roles, the local organizations can also play potentially negative roles that worsened the existing poor condition of the local communities.

The negative roles may include:

a. Perpetuation of inequitable social systems;

b. Controlling rural poor communities;and

c. Weakening or destroying local cultures.

The BDH support delivery system and orientation are to be geared to establishing local target group organizations possessing certain attributes.

FIGURE XXIII shows the characteristics of good local organizations, along with supportive criteria.

2.2.2. Local participation.

A key factor affecting the choice of responses to BDH's stipulated outputs, purposes and goals is the link between the felt needs of BDH's target groups and BDH's goods or services offered to them through project interventions. This link will be most effectively created when the target groups are actively and meaningfully involved in both the process of determining goals and allocating resources to achieve them, and the execution of resulting programs or projects.

Possible beneficial functions of participation include the following functions:

a. Adapting new ideas to local circumstances;

b. Gaining acceptance for new ideas;

c. Obtaining a resource commitment;

d. Handing activities over to local people in a manner that will become self-sustaining; and

e. Limiting or reducing exploitation.

There are indeed many factors that constrain the implementation of BDH project, the operation, maintenance, development of BDH's outputs, by active participation of the target groups.

Those disadvantageous factors are, among others:

a. Weak BDH's field managers and supporting technical agencies who are much dependent on higher authority for both decision making and resources;

FIGURE XXIII
CHARACTERISTICS OF ORGANIZATIONS CONTRIBUTING TO RURAL DEVELOPMENT

CHARACTERISTICS OF ORGANIZATIONS CONTRIBUTING TO RURAL DEVELOPMENT	SUPPORTING CRITERIA
1. Openess to participation by a broad spectrum of the community (Boundaries drawn by functions, not economics or social status).	1.1. Local participation in organization design. 1.2. Broad and frequent interaction within organization. 1.3. Accountability to members by those allocated and using organizational resources. 1.4. Broadly-based managerial and technical skills.
2. Consistency with culturally accepted practices.	2.1. Conformity of new organizations to norms of traditional institutions. 2.2. Adaptation of existing organizations to new functions. 2.3. Traditions of broad-based community dicision making.
3. Capacity for multiple adaptations and functions. (This characteristic must be assessed in terms of the particular organization environment and the relevant tradeoffs between single and multiple functions. Too many functions may lower performance or concentrate excessive power in a single organization).	3.1. Delivery systems capable of meeting the needs of more than one group in a coordinated manner. 3.2. Capacity to respond to changing community priorities. 3.3. Multiple constituency support providing broader economic bargaining power.
4. Linkages, both horizontally to complementary institutions and vertically with centers of power controlling policy and resources.	4.1. Mutual reinforcement of technical and administrative skills and services to the community. 4.2. Support from bureaucratic systems independent of local dicision making. 4.3. Access to resources not available locally. 4.4. Participation in communications networks to broaden awareness of local needs and circumstances at policy making levels.

CHARACTERISTICS OF ORGANIZATIONS CONTRIBUTING TO RURAL DEVELOPMENT	SUPPORTING CRITERIA
5. Equitable distribution of organizational benefits.	5.1. Broad participation in organizational activities and leadership. 5.2. Relative equity in local asset ownership patterns. (Unequal landholdings may have been a proxy for the presence of progressive farmers able to give effective leadership to organizations. Impact does not necessarily imply equitable distribution of benefits). 5.3. Organizational accountability to a community constituency beyond its members).

b. Local dominance of elite groups controlling production relations;

c. Dependency of poor members of the target groups on patrons affecting perceptions of risk and attitudes toward change;

d. Lack of local managerial, financial, and organizational skill; and.

e. Limited capacity of the poor to make resources commitment.

Effective management strategies for inducing participatory and interactive actions require recognition of those disadvantageous factors.

The preceding points have presented two mechanisms i.e. "organization" and "participation" for successful implementation of BDH project activities in ways which support target group's response. However, transferring these two mechanisms from theory to practices is a function of BDH management.

2.2.3. Management.

Management approaches to BDH project implementation may range from a "blue print" style to a "process" approach. The blueprint style approach is typified by certainty on the part of BDH planners and managers that predetermined technologies and intervention techniques will work in a given local situation. This approach assumes that solutions to problems are known and that BDH projects are vehicles for the application of these solutions.

The process approach, by contrast, assumes considerable uncertainties and is characterized by flexibility, an emphasis on learning, continuously open to redesign, and adaptation to changing circumstances. This learning/process model includes characteristics as follows:

a. A design broken into discrete phases;

b. A large amount of short-term technical assistance;

c. An emphasis on action-oriented training among both BDH management staff, supporting agencies' staff, and the target beneficiaries;

d. A reward system consistent with a learning orientation;

e. An applied research component;

f. A learning component, such as a "rolling" regional plan;

g. A redesign orientation, such as periodic revisions of BDH project organizations, objectives, and job description of project's and supporting agencies' personnel.

The process approach is likely to elicit voluntary local response than the blueprint style because process approaches grow in scope and complexity at a pace consistent with the abilities of the target beneficiaries (intended, desired, and potential) to absorb. However, these approaches also make major demands on BDH project managers and staff.

A critical factor in implementing and sustaining BDH process initiatives, at the local level, is effective leadership. There are problems in trying to promote rural development through traditional leaders. They may lack skills or can be captive to local interest groups who are unsympathetic to rural poor community development efforts based on a variety of reasons. These potential problems ought to be weighed against the advantages provided by the traditional legitimacy, and local community support, enjoyed by these traditional leaders.
The alternative, at least in the short-term, is dependence on stronger, more skilled outside leadership not as likely to be representative of the poorest elements in the local community.

Community organizations, in particular may benefit significantly from the expertise, influence, energy, and commitment of those outside leader. The challenge is to develop a pattern of shared decision making which is more

inclusive than exclusive. This pattern requires joint planning, implementation, monitoring, evaluation, and determining of corrective measures. It also implies simple field-level management information systems with reporting procedures that incorporate local participation into the process.

Involvement /participation of the BDH's target groups, most particularly the intended target beneficiaries, in BDH project decisions and activities is party dependent on the relationship between BDH project management and its lower-level personnel. This relationship has a direct bearing on staff attitudes and performance. The implications of staff relations influencing appropriate local target group's responses are as follows:

a. **If participation by BDH internal staff in organizational decisions is truly and consistenly encouraged in the BDH project, the active participation of the BDH target beneficiaries will be much facilitated.**

b. **If informal participation is relied on, BDH staff are more likely to minimize target beneficiaries' roles than if formal mechanism for target beneficiaries' participation are built - in to BDH project designs or introduced during BDH implementation.**

c. **If efforts to give target beneficiaries a voice in BDH project decisions are timed to take advantage of situations that provide encouragement to those who are to yield some control, resistance to those efforts will be lowered.**

FIGURE XXIV summarizes methods for supporting local community's response by identifying important factors to consider when choosing a management strategy.

3. SUSTAINED IMPROVEMENTS IN WELFARE.

The ultimate goal of the BDH program implementation process is to create self-sustaining improvements in intended target beneficiaries' welfare. Unfortunately, this rarely happens. It is

FIGURE XXIV

METHODS TO SUPPORT LOCAL RESPONSE TO BDH PROJECT GOODS AND SERVICES

MANAGEMENT STRATEGY	FACTORS TO CONSIDER
1	2
A. FELT NEEDS AND BENEFITS.	
1. Define nature of response intended (target groups; intensity of response, channels of response, etc).	1.1. Requires cultural sensitivity. 1.2. Risks excessive "blueprinting".
2. Specify environmental factors affecting local risks perceptions.	2.1. Best understood by local BDH personnel. 2.2. Particularly important in BDH project's activities directed towards poor intended target beneficiaries
3. Establish and maintain two-way communication links between BDH management staff and target groups.	3.1. Essential for feedback to BDH management staff and target beneficiaries' needs. 3.2. Keeps target groups informed about BDH activities. 3.3. Served by direct contact between BDH management staff and target groups (e.g. home visits).
4. Design initial benefit package which is specific, visible, and oriented to particular target group's economic needs.	4.1. Suggests sequential approach building on relatively simple, tangible components. 4.2. Reduces risks of misapplication of new technologies.
B. SOCIAL BASE.	
1. Utilize process approach to build local interest and capabilities.	1.1. Adds to BDH project time and possible cost. 1.2. Resistance likely from donors or bureaucrats needing quick, measurable results.
2. Utilize flexible planning methods.	Suggest joint planning mechanisms to maximize inputs from different project levels.
3. Emphasize capacity building in local target group organizations.	3.1. Helps equip organizations to mobilize and lead local response.

1	2
	3.2. Supports process approach as organizations mature.
4. Draw BDH project staff from local talent with strong cultural identification.	4.1. Adds to BDH project credibility. 4.2. Improves understanding of local conditions essential for appropriate response.
5. Engage in multi-level training for target beneficiaries.	5.1. Builds competence to participate in BDH project decisions and activities. 5.2. Develops understanding of broader BDH projects objectives.
C. LOCAL LEADERSHIP AND CONTROL.	
1. Incorporate participatory staff structures in BDH project organizations.	Increases willingness of BDH staff to yield control to target beneficiaries.
2. Apply open BDH project management style (publish management decisions and financial records);broaden access to BDH project activities.	2.1. Provides beneficiaries with opportunity to BDH project initiatives. 2.2. Served by training and capacity building activities.
3. Orient BDH project staff toward services to rural poor segments of communities.	3.1. Influences BDH project staff selection and training. 3.2. Is most effective if supported by incentives to encourage BDH project staff priorities. 3.3. Supported by mechanisms for staff accountability to target groups/ beneficiaries.
4. Utilize simple field level information systems.	4.1. Incorporate local target group beneficiaries in reporting procedures. 4.2. Disseminate information in local language,in understandable form.
5. Elicit local leadership/progressive members of target groups in support of BDH project objectives and activities.	5.1. Takes advantages of existing resources of leadership and power. 5.2. Increases risk of benefit control by elite.

far more common to find that benefit generating activities rarely continue once BDH supports (goods and services) ended. Since the continuation of BDH benefits is the bottom line of BDH, their absence shows a critical need for ways to produce self-sustaining welfare improvements.

3.1. Measuring Welfare.

Welfare is commonly measured by selecting a set of quantifiable variable, such as income per capita to measure material welfare. This measurement is inadequate. Welfare is also measured by less unquantifiable set of variables denoting changes in human and institutional capabilities. This kind of measurement is often unwieldy. Proxies capture only limited dimensions of broader welfare concerns and hence unmeasured effects may offset and even outweigh the effect measured by proxies.

The importance of unmeasured effects of BDH becomes more significant due to BDH project's complexity, integration and comprehensiveness. BDH approaches focus on interactions among variables such as agricultural production, village industries, settlement, health, nutrition, education respectively complemented by appropriate physical infrastructures, facilities, organizational capability, side effects, etc. Weaknesses or failures in one aspects or BDH dimension could dampen total effects, or extraordinary effects with one component could throw the rest out of balance.

3.2. Side Effects.

Despite careful planning and expert management, the complex, integrated, and comprehensive BDH project may cause unanticipated effects. These are generally perceived as negative, but positive ones also occur. Both unanticipated negative and / or positive effects influence BDH planned effects.

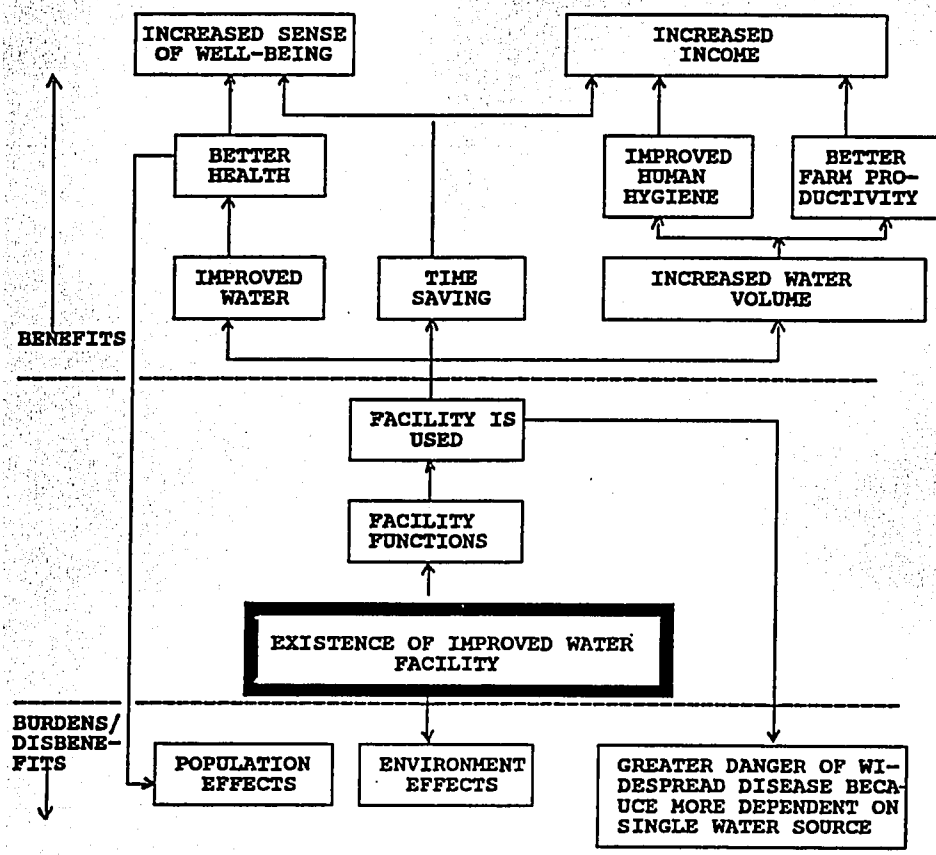
Example : New Potable Water Source Development.

The positive effects /benefits of the newly developed potable water source are commonly known and accepted. But this new

infrastructure causes also negative effects on the environmental elements.
FIGURE XXV shows the complexity of benefits measurement. Given that side effects can be more important than intended effects, BDH designers and implementors need to recognize and deal with unanticipated impacts.

FIGURE XXV

BENEFIT AND DISBENEFIT TREE OF NEW POTABLE WATER SOURCES



3.3. Dealing With Side Effects

Conscious strategies to minimize negative effects have been identified. The three most useful are flexible designs, information systems, and popular participation.

For example:

3.3.1. **If BDH strategies allow for change in project initiatives or direction, the strategies will improve the changes that positive side effects can be built upon, and negative side effects can be minimized.**

This strategy, often called the "process" model of project design and implementation, gives BDH management the flexibility to adjust the course of the project as more knowledge and empirical experience are gained about appropriate approaches, or as negative effects appear.

Designing and applying relevant and usable information systems is a difficult, and rarely achieved, task. Nevertheless, there is a critical need for early warning signs, because:

3.3.2. **If an information system provides timely management and impact data to BDH staff and policy makers, the side effects may be identified early enough to either incorporate them into the strategy or counteract them.**
Furthermore, a warning system is reinforced by local community and target group participation:

3.3.3. **If BDH target groups (intended, desired, and potential) participate in project decisions, the side effects may be identified and appropriate remedies may result.**

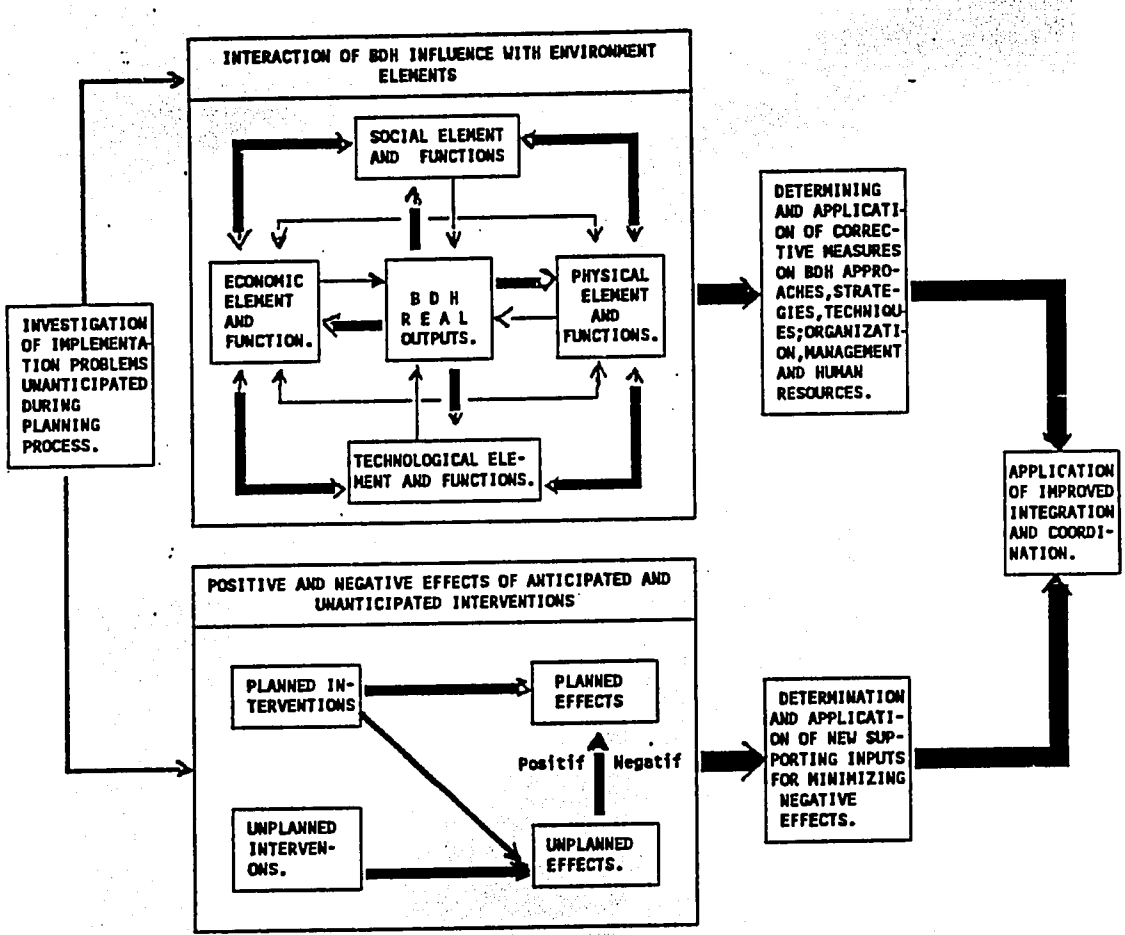
In addition to those three strategies, the organizational placement of authority for decision making, integration of activities, and coordination of functions in certain level of the BDH management organizational hierarchy can influence the ability to deal with negative side effects. FIGURE XXVI shows the control of negative side effects.

Example : Placing authority to a BDH Project Management Unit.

The main criticism on PMUs tend to focus on their non-sustainability because of their temporary nature.

FIGURE XXVI

ACTION DIAGRAM TO OVERCOME OF NEGATIVE EFFECTS OF BDH ACTIVITIES ON ENVIRONMENTAL ELEMENTS AND OTHER UNPLANNED INTERVENTIONS ON BDH PLANNED EFFECTS



BEST AVAILABLE DOCUMENT

Although this criticism is true but PMUs as temporarily founded, sometimes self-destructing, organizations may be more capable of fostering and protecting rural welfare than strategies that cannot be stopped, inflexible and rigid.

3.3.4. If technologies are highly uncertain and experimental, it may be preferable to test them in temporary setting where there is less change of detrimental approaches becoming permanent policies.

3.3.5. If permanent BDH and local government top, middle, and lower management levels are not sympathetic to the welfare concerns of the BDH intended beneficiary groups, it may be preferable to use temporary PMU-type project organizations held responsible for transferring functional capabilities to the BDH intended target beneficiaries.

The placement of authority for decision making, integration and coordination to one level of the BDH management organizational hierarchy will be more difficult if public services conditions, side-effects, the continuation and sustainability of BDH project activities and benefits are simultaneously taken into consideration. Therefore, it is highly beneficial to focus BDH attention to the sequential order of the BDH strategies rather than placing management authority to one certain level of the project management organizational hierarchy, permanently or a one time choice.

3.4. Building Capacity.

An emphasis on the sequential roles that different organizational forms can play reaffirms the need to build performance capabilities either in permanent agencies or in beneficiary organizations that will inherit project functions. Integrated rural development projects' field experience suggests that conditions which favour the creation of self sustaining benefits, are as follows:

a. BDH's project field activities should be small-scale;

b. BDH's activities focus on critical constraints;

c. Potential target beneficiaries should make a resource commitment during project implementation;

d. Organizational capability should gradually be built into the target beneficiaries so that they can run, if not eventually control, BDH activities, and

e. Shared implementation responsibility between target groups and BDH project staff, formal and non-formal training for both target groups and BDH management staff, and target groups' participation in project information systems and decisions should be used to build local capability.

To secure the greatest impact from the application of resources, project focus and project area/site are to be consciously selected. One aspect of selection that determines investment level is **the size of the problem to be tackled.** Another aspect is **absorptive capacity.** That is, if an area /a site cannot absorb new resources, these resources will simply spill over and be wasted. They will not contribute to reducing the problem.

One dimension of absorptive capacity is the ability to spend more quickly. That is, if BDH budget is increased tenfold but the money just sits in the treasury account, it will certainly not contribute to the target beneficiaries' capability improvement.

There are three ways to deal with absorptive capacity of a BDH project.

First : **To accept the situation as a constraint and not overtaxt current capacity.**

Example : To adjust to a limited project spending capacity, additional resources can be kept to a low percentage of present expeditures, or new expenditures can be made routine fixed costs (such as salaries) rather than non-routine variable costs (such as funding multiple, sporadic subproject activities), or

disbursements can be provided on a one -time only basis (such as the initial capitalization for a cooperative revolving credit fund run by the intended target groups).

Second : **To raise the absorptive capacity of the BDH project.**

Example : To employ more treasures, pay master, etc, to develop less cumbersome procedures for turning money into rural activities, training both existing and new agricultural subject matter specialists, skill trainers, extension workers; to undertake training courses for the intended target groups related to farming system, village industry, post-harvest technologies, product processing, marketing system, etc.

Third : **To create a mixed strategy which simultaneously or sequentially, uses elements of both of the previous approaches.**

Although training people, time-phasing the gradual expansion of the BDH project functions and area coverage, and providing initial capital may begin capacity-building efforts, it is still necessary for performance capability to develop and examine workable procedures and wider area of societal incentives. This effort should also include an assessment of incentives for resources commitment after project completion i.e. for operation, maintenance, development and dissemination of outputs, activities and benefits.

Distinction between **benefit continuation** and project **activity continuation** is also needed. While these two notions are interrelated, they are distinct concepts.

Example : BDH project activities are frequently designed to provide supplies, production, and marketing services to the BDH intended target groups. The activities may included such items such as improved seeds/seedlings, fertilizers, credit, the purchasing and marketing of cash crops.

Equally important is to improve the capability of local farmer organizations to perform those functions. To the extent that local BDH participating farmer organizations are developed, these activities no longer need to be undertaken by the BDH management staff. Continued BDH involvement is no longer of interest, and additional resources should not be expended towards that end. Hence:

3.4.6. If project functions cannot be institutionalized within the target group's organizations, there is a low probability that sufficient support (both administrative. political, financial, technological, managerial) will be available for the continuation of BDH activities after BDH resources are withdrawn.

3.4.7. If BDH project has self-contained, small -scale components, it is likely that some component activities will continue to provide benefit streams after BDH project termination.

3.4.8. If BDH project does not have any commitment to building target group organizational capability, it is less likely to promote self-sustaining welfare of the target groups.

4. IMPORTANT POINTS OF INTEGRATED BDH ORGANIZATION AND ADMINISTRATION.

The complex, integrated and comprehensive BDH project, as also other integratedly rural development projects, is a process of combining various development services into a coherent effort to improve the well-being of its target beneficiary groups. Its principal activities are delivering goods and services supporting beneficiary response, and promoting self-sustaining development on the part of the target groups including their organizations. Organization design and management behavior of BDH are important factors that influence both the implementation process of BDH and the resulting modifications in rural environments.

4.1. Organization Design.

Many management problems in BDH development can be traced to inappropriate organizational arrangements.

Example : A coordination strategy which disperses authority among numerous agencies and expects a powerless manager to orchestrate and blend their activities into a well sequenced and coherent program.

Inadequate consideration of the importance of organization also affects target beneficiary response to BDH activities and the sustainability of BDH-related innovations. When organizational mechanisms such as resource control, two-way information flows, check-off procedures and local organizations are designed to support target beneficiary participation, then local response is facilitated.

BDH program /project is very complex, therefore its success depends much on its appropriate organization and management system. It is then imperative that BDH designers of BDH activities give organization design a high priority. It should be remembered that each program organization must be custom-tailored to the local context. Local factors such as local history, local program and technologies; intended, desired and potential BDH target groups, socio-political systems and the incentives for important actors to cooperate should all be examined during the organization design process.

Additionally, BDH organization design must not be seen as a single determination of an optimal strategy, but rather as a sequence of organizational forms adapting to emergent conditions and demands.

Example : A BDH's PMU is initially in charge of undertaking a specific BDH pilot project. Because of its successful achievement, the PMU is developed and placed as an integral part of HPH management organization structure to undertake BDH model and demonstration projects.

This scenario should be stated during organization design of BDH based on empirical experience that has been systemized and later on used as formative inputs for change or adjustment of the initial ideas. From this process, BDH managers will know that there is an important interrelationship between organization design and management behaviour.

4.2. Management Behaviour.

Points 1,2, and 3 have indicated the importance of:

4.2.1. **The appropriate placement of authority to integrate sectoral activities and to coordinate implementation activities in the BDH management organizational structure; and**

4.2.2. **Broad knowledge and skills related to policy and decision making, evaluation, control, monitoring and supervision; information system, technical assistance, and two-way relationship arrangements both horizontally and vertically;**

for the realization of BDH stipulated inputs, outputs, purposes and goals. All of them are strategies that are to be applied in the BDH management activities. These strategies are not static but they are to be dynamic to be able to anticipate and respond challenges from within and without BDH in form of interventions, political and economic changes, and changes in the BDH target groups themselves as logical consequence of BDH development activities.

A common weakness is that most BDH managers have not been equipped with appropriate knowledge, skills and empirical experience to undertake those complex processes, particularly if those managers are technicians. To rectify this situation, human resources development activities should be a major emphasis of BDH program.

BDH staff training programs and joint staff/target groups workshops, comparative study tours related to integrated BDH project activities should be arranged and undertaken to build management capability at all levels of BDH actors and

to provide action-oriented settings for problem resolution and implementation planning. The principal purpose of these efforts is to make all parties involved in BDH implementation clearly understand that the objective of BDH is not the perpetuation of organizational forms or placement of physical infrastructure but it is the self -sustaining development of the intended target beneficiaries by increasing their ability to exploit new opportunities and to solve their own problems in an environment characterized by uncertainties.

4.3. Uncertainties.

The relationship between the BDH program design complexity, the uncertainty inherent in the BDH implementation process, and the need for a flexible and dynamic process approach to BDH project design and implementation have been discussed in the preceding parts of CHAPTER III. The principal task of the BDH top managers is to determine an optimal strategy, organization and substance for BDH efforts. The strategy resulting from the effort may be too rudimentary to give optimal guidance and therefore all beginnings are equally appropriate as long as it is flexible to adjust to the constraints identified during BDH implementation.

It should also be remembered that BDH program is a relatively new effort to develop poor areas and intended target beneficiaries living within and around HPH working areas whose main occupation known up to the present is shifting cultivation and/or illegal forest products harvesting. Therefore, approaches, strategies, field techniques, tactics and even technologies applied are still open for corrections and improvements that should be directed towards the achievement of effective and efficient utilization of available resources. Changes in all BDH implementation aspects are to be based on systemized empirical experiences which are made as formative inputs for the realization of BDH higher objectives.

Example : A BDH project undertaken in a specific site comprises four integrated and interlinked development activities, i.e. A, B, C and D. Based on mutual agreement / concensus between

the BDH managers and the intended target beneficiaries, A is to be given priority for implementation in the first year because it is thought to have leverage for B,C and D.

All resources such as land, material, fund, labour, tools, equipments, technologies, organization and management systems have been in place. Implementation experiences resulted from A implementation, strengths and weaknesses of approaches and strategies applied are recorded and analyzed to produce corrective measured which are subsequently applied for A performance improvement.

In the second year, development activity B is started and will get the same treatment as applied to A in the first year. Thus in the second year, improved A is on-going simultaneous with B which is just begun.
The process is replicated for C and D.

The BDH program development process as described above insure previous BDH activities as established strong bases for the next activities so that all BDH activities will eventually be interlinked, low-cost and institutionalized in the BDH target groups. The figure below shows the change of status of BDH activities as described in the example.

CHANGE OF STATUS OF BDH ACTIVITIES/COMPONENTS

ACTIVITY	YEAR						
COMPONENT	I	II	III	IV	V	VI	VII
A	Pilot	Model	Demons-tration.	Generali-zation.	-	-	-
B	-	Pilot	Model.	Demons-tration.	Generali-zation	-	-
C	-	-	Pilot.	Model.	Demons-tration.	Generali-zation.	-
D	-		-	Pilot.	Model.	Demons-tration.	Generali-zation.

If the BDH management organizations receive full support from the HPH management organizations in form of fund, manpower material, tools, equipments in accordance with needed amounts and quality on

a timely manner, and given enough authority for integrating BDH field activities with those of similar local projects, and for coordinating functions with those who formally should be involved in BDH program, the BDH stipulated purposes and goals will be most probably accomplished within a given time.

4.4. Incentives.

Field experience shows that many integrated rural development projects whose target beneficiaries are economically, socially, technologically, managerially and organizationally weak, have turned near total failures despite their technical feasibility, socio-political acceptability and financial justifiability. The underlying reason can be identified in two factors i.e. psychological and incentive factors.

4.4.1. Psychological Factor.

Psychological factor that turns into obstacles in rural development projects are:

a. Heavy burden of tasks assigned to project staff without provision of adequate amount and quality of supporting inputs. This usually results in frustration.

b. Heavy burden of tasks which is far beyond the capacity and capability of the assigned to meet, added by inflexible procedures, most probably results in safe-playing attitudes.

c. Heavy burden of tasks not complemented by adequate inputs, to be undertaken with inflexible procedures, assigned by arrogant and self-justifying authority holders, will definitely results in apathetic attitude on the part of the assigned.

4.4.2. Incentive Factor.

Incentives play an important role in rural development project.

a. For project implementation to follow the design, incentives for people to act as intended must be stronger than pressures which support competing behaviour patterns.

b. Leaders often do not emerge because organizations provide disincentives for creative leadership. Selecting personnel is not enough; incentive systems must support desired staff behaviour.

c. Different structures of incentives within an organization create more problems than solve existing ones.

Incentive systems for the staff of integrated and complex rural development projects, including BDH, are likely to be even more crucial than they are for single purpose rural development programs.

PART IV

TRAINING AND EXTENSION

Training and extension are two of a huge number of factors that contribute to increased productivity of the intended, desired and potential BDH target beneficiaries, and are not considered as essential ingredients i.e. improved technology, available inputs, and attractive markets, at that.

Training and extension need the availability of those ingredients together with other physical and non-physical inputs, infrastructures and facilities needed in rural, area and regional development programs; organization of activities and institutions, and management systems as means to effectively and efficiently utilize available development factors.

Training and extension are, principally, mechanisms for transfer of technologies, empirical experience and practical skills by HPH and BDH management organizations to the BDH intended, desired and potential target groups through specially founded organizations for implementation of the designed training and extension plans and schedules. Due to the fact that BDH is still at its initial

stage and which should be undertaken by HPH enterprises who are doubted to have appropriate professional capacities for that, it is logical that proper training and extension plans and schedules needed in the implementation of BDH program have not been available. The existing programs are at ad.hoc stage, and in bad need for directives to determine material, presentation of material, tools and equipments for implementation.

Monitoring and evaluation systems for field training and extension progress, achievement, effects and impacts on trainees and target beneficiaries are very weak. The training and extension teams who are in charge of introducing and demonstrating the benefits of technologies including relevant instruments required in applying those technologies, organizing activities and institutions directly involved in and influenced by BDH, administrating training and extension activities including reporting systems, are much to be desired.

The much required function and task relationship between BDH training and extension teams and existing technical agencies' extension and training centers and field staff related to rural primary, secondary and tertiary industrial development, demographical affairs; heath, education, political development, and research centers, is still very loose.

Another not less important aspect is the availability of programs or plans to upgrade the capability and quality the BDH training and extension agents themselves. The direct effects of inappropriately low quality standard of BDH training and extension activities is the low response of the BDH target beneficiaries to BDH initiatives.

1. TRAINING AND EXTENSION IMPLEMENTATION.

The most effective training and extension system for the highly complex, integrated and comprehensive BDH program is training and visit system, abbreviated T & V system.

T&V system facilitates the establishment and institutionalization of relationship between BDH training and extension agents and BDH target groups, research bodies and researchers, non-government organizations engaged in rural area and community development, and training and extension field workers of technical agencies

operating within and around HPH work areas. By integration of training and extension activity programs, by coordination of functions, by cooperation and teamwork in training and extension operation, of those various institutions, BDH training and extension agents will be able and have capability to better adjust their operation plans and schedules, to adjust their limited inputs to the existing situation and target group's real needs to achieve optimal effectiveness and efficiency of their efforts.
To institutionalize T & V system implies many problems.

First : **T & V system demands bigger amount of funds than the traditional.**

T & V system demands a big number of trainers and extension agents, each having in command specific expertise, at the initial stages. However, the amount of fund spent will produce bigger, more continual and sustainable positive effects.

Second : **At the initial stages of enhancing the strength of T & V system, an in-depth understanding of the existing structures of training and extension, constraints, and the determination of problems and constrain solution, are critical.**

T & V system requires a considerable formative inputs from properly arranged and structured field research activities i.e. result from pilot, model and demonstration projects that have been systemized and made ready as valid and reliable information. T & V system that utilizes valid information from field /applied research undertaken in areas having similar human, natural, and man-made characteristics with those of T & V system work area, will have better chances to succeed in avoidance of technologies, approaches, strategies, field techniques, approaches, strategies, field techniques and tactics, organization and management system, unsuitable to the work area.

Third : **T & V system is often considered as remedy for all kind of ailments.**

T & V system of high credibility and believability that can be spread widely to the work area of HPH will be gradually formed within a relatively long timeframe. It often happens that immature

T & V system whose acceptability and applicability have not been undergone appropriate field-tests are disseminated because bureaucrats of HPH managers want to see real successes within a very short time. It ought to be remembered that a BDH project is an integral part of the five-year BDH program, and the latter is one of the long-term BDH program. The ultimate goals of BDH could only be achieved within the long-term BDH program. Demanding the ultimate goals of the BDH to be accomplished within three or four years after BDH is started is not rational if it does not add new problems.

Fourth : **Difficulties in determining the ratio between traing/extension agents and the number of target beneficiaries each to serve.**

The ratio between a BDH training/extension agent and the number of target beneficiaries he/she has to serve should be based on the degree of the extension agent's operation equipment availability; the degree of the target beneficiaries technological, economical, cultural, organizational and managerial capability and capacity; the degree of needed operation inputs required; the settlement patterns, the site of settlements; the type /kind of sector / activity that is to be undertaken at a certain time, and the degree of voluntarily and agreed upon support provided by local technical agencies and other institutions.

The target beneficiaries whose technological, socio-cultural and socio-economical capability have been relatively adequate, whose access to sources of advanced technological, physical, non-physical inputs have been relatively high, and who received consistently strong support both physical and non-physical from their own organizations within his environs, the extension agent - target beneficiaries ratio will be more or less 1:800. The ratio will be much less if the conditions of the target beneficiaries are lower.

Those four problems determine the amount of fund needed to make T & V system applied smooth and achieve its outputs and purposes, which eventually is for the HPH holders to decide.

Several ways to reduce BDH's T & V budget are as follows:

a. Integrate BDH project with other similar integrated rural development projects funded and initiated by the local village, district and provincial governments, and other line agencies who act on behalf of ministries.

b. Coordinate BDH activities with other rural, local governments; line agencies development activities to avoid duplication and replication of similar activities in the area where BDH operates.

c. Build/found and establish intended target group organizations based on functions and/or specific activities as vehicles for training and extension implementation.

   Create and establish local leadership that later on is to function as dissemination agent of technologies, approaches, strategies, field techniques, organization and management system practiced by BDH that have been proven effective and efficient.

   The organizations are encouraged to form their own assets and recurrent capital by applyiiing warious ways that simultaneously help their respective members improve their economic status. By using their assets and capital, the organizations are eventually expected to be able to take over all BDH functions.

d. Utilize available community communication media within or around HPH work areas to deliver BDH technological messages, ideas, initiatives, etc, as measures to make potential target beneficiaries mature for adopting HPH project activities. By proper use of these media. BDH will be able to lower operation costs, save time, energy and manpower.

e. Arrange and give properly and appropriately structured training courses for BDH field skill trainers and extension agents so that they have in command reliable techniques and knowledge able to instill credibility and trust on the part of the target beneficiaries.

2. TECHNOLOGY GENERATION.

Experience shows the T & V system will not have continual and sustainable acceptability and applicability unless it is continually and sustainably able is provide and introduce more advanced technologies than the previous, but highly relevant to the ever-changing real needs of the target beneficiaries, adjustable to various agro-economic zones, and capable to meet target beneficiary's and local social and economic demands, and politically acceptable to local governments and their respective technical agencies.

The technologies of the four BDH components could be developed by three ways:

a. Properly focused and well conducted research which is a prerequisite for effective extension;

b. Placement of priorities on solution of BDH component problems having highest leverage; and

c. Smooth and timely availability of feedback from BDH's target groups and extension staff which are essential to ensure that research focuses on target group's problems.

Example : Upland farming technology generation.

T & V system itself has a built -in potential for rapid feed-back from target beneficiaries that puts pressure on research to be more responsive to their needs. Participation from research workers is required at the outset in assisting extension staff to identify impact points for the initial seasonal programs, and subsequently to evaluate and revise the impact points of each season according to farmer response. Diagnostic surveys by teams of competent staff provide an appropriate methodology for this approach.

The results of diagnostic surveys, besides helping to strengthen the links between research and extension staff, add a new element to the planning of the following year's extension, adaptive and applied research programs to supplement the results of trials, and the feedback coming routinely through extension staff.

The effectiveness and relevance of extension and training revolve around well chosen and appropriate impact points. Careful monitoring of these, and of whether they are revised each season, help to measure performances and to ensure that the system remains dynamic. Participation in technical advisory and planning committees, the conduct of monthly training for subject matter specialists, and shared responsibility for adaptive research, all forge stronger links between research, extension and training. FIGURE XXVII shows the interrelationship between research, extension and training.

Solution to the technical problems of upland farming are very needed by small and resource poor farmers with multicrop rainfed farming systems. Recommendations for each crop ought to be adapted to its place in the farming system and to the relative importance the farmers place on the crop. Resource poor farmers are almost always more interested in improved stability of yield rather than on the increase of productivity, particularly under high-risk conditions for production.

Integrated farming systems are important to poor farmers by the following reasons:

a. Integrated farming system is seen as a balanced interaction between locally natural, economic, and cultural conditions; priorities, and resources capabilities.
The same farming system practiced by many farmers in a certain area at certain time shows that the farmers are homogeneous.

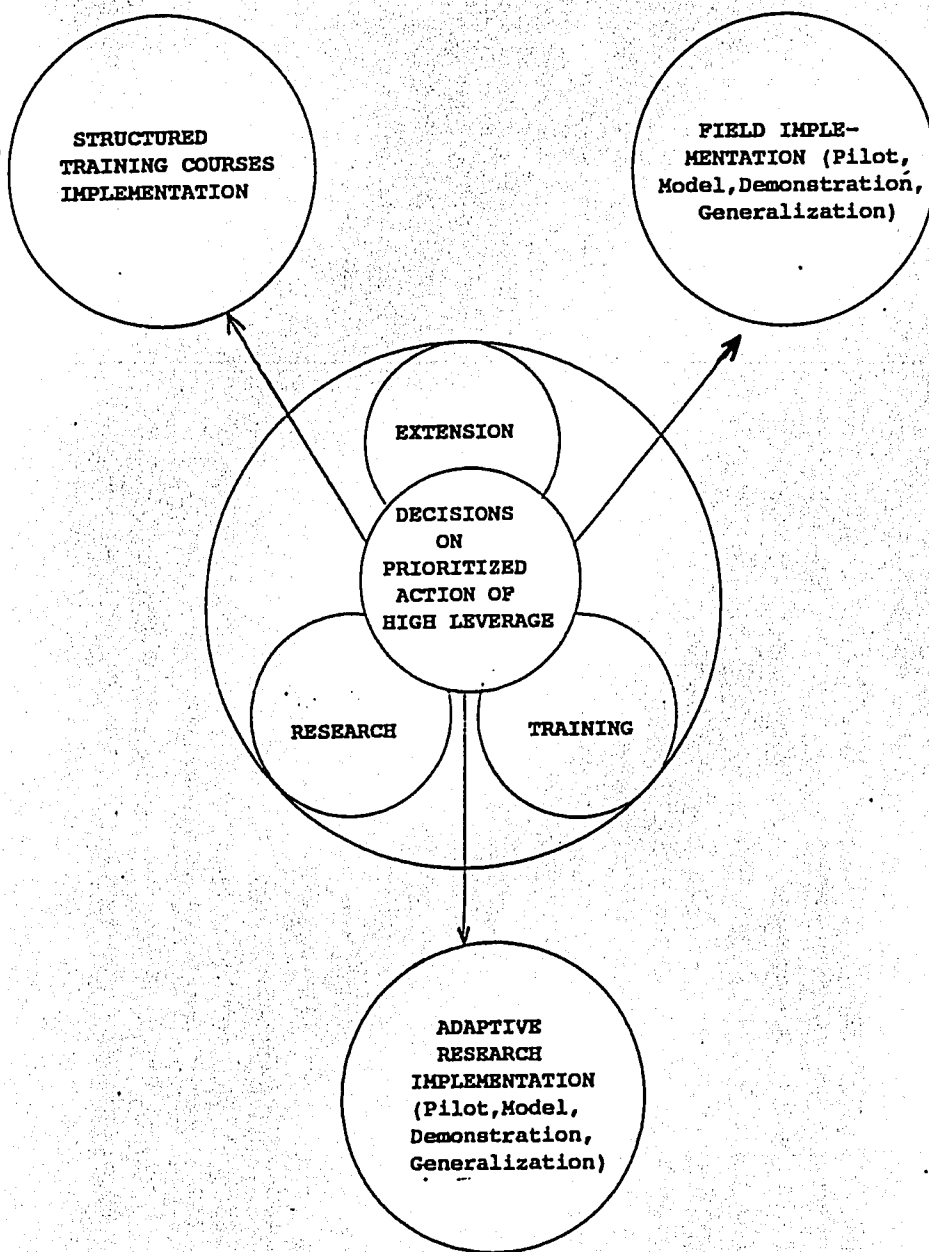
b. The same farming system practiced in a certain area faces most possibly similar problems and development opportunities. This facilitates farmers to be united and organized based on functions.

c. Integrated farming systems are always the starting point of area development and reliable bases that can be used as capital for increasing productivity in the immediate future.

An understanding of the various farming systems help the extension workers in identifying different farmer groups and in defining appropriate recommendation for each of them. It also helps the extension, training, and research workers jointly identify farmer problems that may require the application of already available relevant research results or adaptive trials or the need for a longer-term applied research program.

Experience gained from the application of T & V system also shows that the subject matter specialist plays an important role in the system. He/she is the key link between research and extension, and he/she both designs and carries out the training of all field staff.

FIGURE XXVII
RESEARCH, TRAINING AND EXTENSION RELATIONSHIP



He /she is expected to spend his time as follows:

a) 30% of his/her time for conducting training;

b) 30% of his /her time for liaising with research staff and preparing training material;

c) 30% of his /her time for giving guidance to staff in the field, obtaining a better understanding of farm systems, and receiving feedback on the efficiency and effectiveness of selected impact points; and

d) The remaining 10% of his/her time for attending skill training courses, administration work, and probably attending routine meetings.

Part of his /her time spent in research and in the field will also be concerning and executing, jointly with research and field extension staff, a program of adaptive on-farm trials, field-testing new technologies or innovations. This task is very demanding but it provides him/her with various significant skills. The higher the quality of the subject matter specialist the better his /her achievement.

In short, technology generation will be satisfactory if:

a. Technical messages are constantly given attention to, and

b. The quality, acceptability and applicability of technical messages are continually improved.

The importance of technology generation demands more intensive involvement of research staff, particularly in finding solutions to existing farmer problems and in developing farming systems.

Technology generation of the other RDH components i.e.settlement health and nutrition, and education, development systems is similar to that of farming systems.

3. SOCIOLOGICAL ASPECTS OF KNOWLEDGE TRANSFER PROCESS.

The transfer and diffusion of new technologies is, to a large extent, a cultural communication process to result in positive economic and social change. T & V system is the organizational vehicle for technology transfer and is designed to be an effective carrier of messages communicated both ways. The main actors in this transfer process under the T & V system are the extension workers and the informal leaders of the target groups; both are transfer agents at the grass roots.

Although the T & V system is sometimes perceived as an organizational pattern that multiplies field agents, its genuine priority is not to increase their number but to use them

better. The better the quality of, and the more effective, the extension workers in transferring BDH messages to the target beneficiaries, the stronger the participation of the target groups themselves in all aspect of the BDH, and the more successful the program is likely to be, because the active participation will be more continual, sustainable and simultaneously more effective and efficient, well supported by their ooown organizations. The quality of the transfer agents and the contents in the transfer process can be further improved by several activities:

First : Implementation of training and visit plans and schedules, and well-focused impact points, as well as possible.

Second : Education and training of the transfer agents themselves.
Regular visit schedules are essential to develop a continuing and growing relationship between BDH transfer agents and the target groups. From the target beneficiary viewpoint the regular visits is one the most welcome features of the system. If added by good training, the regular visits will have richer contents.

Third : The attention of the BDH transfer agents is not only focused on BDH technical messages but also on the improvement of their understanding of the target group's technical practices and ecological characteristics that support and handicap their economic and social advancement, including the reasons for their doing things the way they do.

An in-depth understanding of the target group's behaviour, economic practices, and economic system is very important in determining appropriate impact points, and in preparing technical messages. The transfer agents themselves are to able to put those messages into practice and demonstrate the benefits of each technical message they transfer to the target groups.

The T & V system is designed to provide and deliver better technical services to the target groups. Field workers either skill trainers or extension workers are to perfectly understand their functions and realize that their capability to deliver recommendations which are appropriate and relevant to the needs and socio-cultural aspects of the target groups, determine the quality and achievement of BDH T & V system.

3.1. Extension And Training Agents.

Extension and training agents are not, however, generally trained in the management of integrated and complex rural development project or its individual component which is related to socio-economic, socio-political and socio-cultural development. They are commonly neither trained in

organizations, administration, approaches, strategies, field techniques and tactics needed in the implementation of complex rural development the success of which is much dependent on continual and sustainable active participation of the target groups and other institutions involved in rural community and rural poor development.

Due to their lack of management skills, the extension agents rarely include management aspects in their extension and training material. This weakness, more often than not, results in discontinuation of BDH activities, outputs operation and maintenance, soon after BDH stops its supports. Target group organizations that should be serving as vehicles for sustaining BDH activities and benefit, due to management weaknesses, get weaker and weaker and finally disband themselves. Therefore, extension worker training plan should incorporate management aspects as one crucial training material.

Fourth : Management aspects should be made an important impact point in the subject matter specialist training curriculum.

Another weakness frequently identified in transfer agents' knowledge and skills is that they lack practical understanding of target group and local community sociology. This weakness creates problems in T & V system, particularly the problem of technology diffusion and the problem of selecting, adapting, and tailoring technologies to the real needs and absorptive capability of the target groups.

The four prerequisites discussed above show that an important issue for improving T & V extension system is management of the extension service in a way that promotes and sustains a combination of traditional and scientific knowledge of rural development at the level where extension comes into contact with the target groups.

To improve the quality of T & V system, there are several options to be considered by HPH holders:

First : option is to incorporate into the training curriculum for extension agents, a management system appropriate for each BDH main component, needs and constraints of the target groups in their efforts to improve their economic and social life.

Training material, can be collected from local government technical and non-technical agencies, universities, non-government organization engaged in social and rural poor advancement development. Training materials answering the needs of the BDH extension agents will be useful for T & V system.

Second : option is to train the extension agents to have in command some system analyses, appropriate for integrated and complex rural development projects, including BDH. The training of these analyses will be useful for BDH extension agents to determine solutions to critical problems inherent in BDH projects.

Experience indicates that the training of system analyses can be completed within six months which are to be divided into several two-week training sessions. Each training session should, as much as possible, emphasize on action-training methodology. One of the many activities of action training for the BDH extension agents is diagnostic study concerning several would-be members of the target group organizations. operating in their work areas. The diagnostic study is to cover problems, constraints, traditional technologies as well as new ones practiced by BDH target beneficiaries, most particularly those relevant to the stipulated BDH components and opportunities available to undertake adaptive research.

A diagnostic study undertaken by the extension agents will be successful if:

a. It is an integral part of each training session's curriculum;

b. It is not an individual activity, but group action;

c. It is always under guidance, control, and supervision of the subject matter specialist.

Group action provides another important benefit because during the application of system analyses on the diagnostic study results, the group members will have many opportunities to exchange experiences gained during the implementation of their respective routine tasks and functions as extension agents and skill trainers, and also opportunities to enrich their knowledge and practical skills.

Good analyses results that directly relate to their needs for implementing their routine tasks and functions will serve as formative inputs in determining technical and non-technical messages that suit target beneficiary conditions, in evaluating the acceptability and applicability of the research results, and in designing inputs, outputs, purpose and goal of their respective extension or adaptive research plans and schedules.

An additional benefit that can be gained from diagnostic study undertaken by trainees is that both the subject matter specialist and field extension workers will get better sociological, economic, and psychological understanding, and better knowledge of the characteristics of their respective target beneficiaries.

3.2. Informal Leaders

The basic theme of the T&V system is an established cooperation between extension agents and target beneficiaries through their informal leaders. The informal leaders are expected to be capable of delivering and disseminating recommendations received from the extension agents to the intended and potential target groups consisting of rural communities. This calls for a considerable increase of the role of the informal leaders as transfer and change agents in the overall T&V system strategy. The dissemination of BDH recommendation by the informal leaders will be much more effective and autonomous by demonstrating the leaders' own success in the application of the BDH recommendations.

The dissemination of BDH recommendations will have effects that vary from place to place due to the influences of site specific social, economic, natural, and sometimes even political, circumstances. It is in this respect that the extension agents are to come to the rescue and help the informal leaders perform their participatory functions.

Experience shows that the implementation of the informal leaders' participatory functions will run smoothly if :

First : The informal leaders actively participating in disseminating BDH messages and recommendations are democratically appointed by their constituents. They enjoy organizational supports.

Second : The BDH messages and recommendations disseminated have been proven much more beneficial and profitable than those delivered before and applied by the target groups. The benefits of the recommendation have undergone field-tests.

Third : The target group organizations, where the informal leaders are members of, have established relationship, coordination and cooperation, with local formal and non-formal community organizations in applying and disseminating BDH recommendations. They enjoy local political supports.

Fourth : The informal leaders are in good command of various specific knowledge and skill of high acceptability and applicability as entry-points to various target groups and strata of the rural community, to various field neighborhoods, and to various ethnic groups.

Fifth : The informal leaders have appropriate capability to "manipulate" locally specific characteristics of their target groups such as customs, beliefs, aspirations, prides, value systems, aesthetics, fears and worries, all are factors that form dominant motifs of the target groups to accept of reject BDH messages and recommendations.

Sixth : Each informal leader focuses only on one specific message or recommendation of BDH. He is a specialist.

Seventh : The informal leaders use local languages or dialects in their dissemination activities. Their presentations are to be easily understood, nice to listen to, and able to create psychological vigour on the part of their listeners.

Eight : The informal leaders are to, as far as possible, keep themselves away from self-justifying behavior, but be accommodating.

All those criteria for informal leaders hold also good for field extension workers and skill trainers, subject matter specialists, and field research workers as well. FIGURE XXVIII shows the stages of change of extension functions of both the extension agents and the informal leaders.

FIGURE XXVIII

STAGES OF CHANGE OF EXTENSION FUNCTIONS IN T&V EXTENSION SYSTEM

STAGES OF CHANGE	EXTENSION FUNCTIONS					
	EXTENSION AGENT	INFORMAL LEADER AT EACH STAGE OF CHANGE				
		I	II	III	IV	V
I	FACILITATOR	LEARNER	-	-	-	-
II	MOTIVATOR	FACILITATOR	LEARNER	-	-	-
III	ADVISOR	MOTIVATOR	FACILITATOR	LEARNER	-	-
IV	RESOURCE PERSON	ADVISOR	MOTIVATOR	FACILITATOR	LEARNER	-
V	-	RESOURCE PERSON	ADVISOR	MOTIVATOR	FACILITATOR	LEARNER

4. MONITORING AND EVALUATION OF T&V SYSTEM OF BDH PROGRAM.

Monitoring and evaluation of T&V system of highly complex BDH program demands individual treatment of two most important BDH T&V system components i.e. **T&V impact points** and **message delivery media.**

Monitoring BDH messages through T & V system is directed toward identifying how far the BDH messages are relevant to the target group's real needs, how far positive changes could be achieved within a certain timeframe, and how far the target group's response could contribute to the solutions to problems and constraints suffered by the target groups.

Monitoring of the message delivery media is similar to monitoring of T & V system's operation efficiency and effectiveness through the measurement of messages acceptability and applicability.

The acceptability of massages could be measured by the degree of the messages' credibility in the target groups point of view. The applicability of the messages could be measured by the number of target groups practicing the messages in their efforts to develop their economic and social status. The quality of the messages is measured by the magnitude and sustainability of voluntary and spontaneous application of the messages. The application of the BDH messages by the target groups shows that they understand the messages' beneficial and profitable qualities.

The evaluation of T&V system is undertaken to measure the impacts of the BDH messages/recommendations application which can be quantitative and qualitative of nature. The quantitative impacts can be easily measured.

Examples : Before the application of a farming system, the production value of one land unit within one year was at the overage of Rp 1,000,000. The value of all inputs amounted Rp 800,000. The profit was Rp 200,000. After the application of the farming system, the production value became Rp 2,000,000 but the inputs cost Rp 2,100,000.
The impact of the farming system applied is negative. The farmer lost Rp 300,000.

The evaluation shows that there are some wrong aspects in BDH message which are to be, as soon as possible, corrected and improved. If not, the credibility of the message will be lost and logically also the T & V system.

The impacts of one specific message may vary from place to place due to differences rooted in local social, economic, political conditions, and difference in the media utilized in message delivery.

Studies to collect more detailed data and information can be undertaken by sample surveys, for example, of several households of the target groups deliberately selected for surveys.

Studies on cases which are more sociological of nature could also be undertaken by sample surveys, but "sit and stare" method which takes more time to do will be more appropriate to measure qualitative impacts of the BDH messages application.

Another method to measure the extent of the T & V system's influence, and reactions of the target groups towards BDH T & V system is small-scale sociological studies, including observation undertaken by the target groups themselves.

Rapid appraisal studies undertaken by experienced researchers and interviewers may also be able to produce valid and reliable information on target groups' behaviour and reactions.

CHAPTER IV

CONCLUSSIONS AND RECOMMENDATIONS.

By consistently referring to the Ministry of Forestry Decree No.41/Kpts-II/91 concerning The Roles of Forest Concession Rights Holders In The Guidance Of Communities Within And Around Forest, most particularly the goals of HPH Bina Desa Hutan/Forest Village Development Guidance By Forest Concession Rights Holders /BDH i.e. "the increased community welfare" and "the sustained forest resource"; by in-depth study of Decision and Circular

Letters of the Director General of Forest Utilization concerning BDH management stages and management processes; and to the extent of the consultant team capability to addhere to the Terms Of Reference for the Study Titled "Enhancing The Roles Of Local Community In The Development Of Forestry Resources", most particularly the outputs, tasks, and study activities; the consultant team of PT Ardes Perdana are jointly able to produce formative inputs for the improvement of BDH program in the immediate future.

1. CONCLUSIONS.

BDH performance at the field level within the last 2,5 years has not been able to serve as an established fundament for the realization of BDH development program's stipulated outputs, purposes and goals stated in the Ministry of Forestry Decree No. 691/Kpts-II/91. The BDH activities are separately undertaken, not continual, not sustainable, and do not have any disseminating capacity to neighboring sites of the BDH site itself. In certain cases, some of BDH actions do indeed produce effects and impacts in total contrast with those stipulated such as the rapid increase of the number of shifting cultivators and illegal forest products harvesters who are in their turn cause more rapid degradation of forest resources, uncontrolled external negative effects on local beliefs, customs, aspirations, value systems, fears and worries; all of which are forging forces for local livelihood stability.

The unsatisfactory BDH performance is most generally a direct effect of weaknesses and constraints inherent at each level of the BDH management organizational structures beginning from the BDH decision and policy making level down to the BDH field actors level i.e. BDH facilitators and motivators.

1.1. Weaknesses at Policy and Decision Making Level.

1.1.1. The BDH policy and decision makers do not clearly and elaborately indicate the BDH components that provide direct contribution to the realization of community welfare, the development of each of which must be sustainable environment-oriented; do not clearly describe general approaches and

strategies that could serve as guidelines in management stages and processes directed toward the achievement of BDH outputs, purposes and goals; do not elaborate organization, administration and management systems crucial in applying the approaches and strategies; neither clearly define BDH support delivery system able to foster continual and sustainable active participation of all parties involved in, and influenced by, BDH program; nor design BDH activities, empirical experience and benefit dissemination system which will much contribute to the rapid decrease of the number of existing, simultaneously to the prevention of new, shifting cultivators and illegal forest products harvesters.

1.1.2. The diagnostic study system designed to have capability in providing valid and reliable formative information for long-term, five-year BDH programs, and annual BDH projects planning, each comprises outline, detail, site and operation plans, turned out to be still much to be desired. Weaknesses in diagnostic study design result in vague and doubtful information which in its turn causes problems and constraints in all BDH components and operation aspects.

1.1.3. The BDH policy and decision makers at both the Department of Forestry and the Forest Concessions Rights/HPH holders do not determine the volume of fund specifically put aside and provided for long-term and five-year BDH programs, and annual BDH projects which respectively are an integral part of the long-term, five-year, and annual forest exploitation plans.

The uncertainty of the fund volume causes considerable difficult for BDH planners at every level of the BDH management organizational structure.

1.2. Weaknesses and constraints at BDH implementation programmers.

Weaknesses at the BDH policy and decision makers level, the inappropriate management information system; the vague, inconsistent, and unconstant incentive and disincentive system and its application; the traditional paternalistic attitude and behaviour which is still strongly institutionalized, the frequent instructions and demands beyond the antagonistic capacity of the receivers, the very limited amount of fund for BDH planning and implementation; the vague degree of management authority delegated to work in coordination, cooperation and teamwork at the regional and local levels, cause incessant and increasing frustration at the BDH implementation program makers. The indicators of this could be readily and easily proven by the fact that most BDH plans have weak applicability and acceptability, do not get active support from local governments and their respective technical and non-technical agencies.

1.3. Weaknesses and constraints at BDH field facilitator and motivator level.

All weaknesses and constraints suffered by the BDH implementation programmer level are inherited by the BDH field facilitators and motivators. Additional factors exacerbating those weaknesses and constraints to the BDH field actors are among others: very limited number of field workers; inappropriate knowledge, skill and empirical experience, considerable risks accruing from daily and frequent contact with grass - root level communities who are by historical tradition feel they own forest land now exploited by outsiders; the untimely delivery of needed inputs which are, more often than not, much less than the expected amount and quality, lack of mobility means, etc, cause BDH field actors to feel squeezed between two real and tangible forces. The best way for them is to play safe as its logical form of attitude and behaviour.

The very weaknesses and constraints identified at the BDH policy /decision and implementation program makers, at the field facilitator and motivator, levels result in weak acceptability and applicability of BDH plans; ineffective,

inefficient utilization of inputs; incorrect conversion of inputs into outputs, activities and benefits, all contributing to near failure of BDH to disseminate itself, due to lack of popular active participation in the implementation of BDH plans, operation, maintenance, and development of project outputs.

Those facts show that the first and most important action to improve BDH program is the improvement of the BDH policy, subsequently followed by the program design, and finally the improvement of the application techniques of the policy and program at the field level. The degree of active target group participation is determined by the BDH policy, approaches, strategies; organization, administration, management systems; the project support delivery and the project activity, experience and benefit dissemination systems.

2. RECOMMENDATIONS.

Based on the conclusions drawn from a rather intensive and extensive study, recommendations, as follows, are proposed;

First : The Decree of the Ministry of Forestry No. 691/Kpts-II/91 concerning "The Role Of The Forestry Rights Holders In The Guidance Of Communities Within And Around Forest" is to be completed with a book containing detailed BDH implementation guidelines that clearly indicate BDH components, approaches and strategies; organization, administration and management systems, training and extension system; BDH support delivery system; and BDH activity experience and benefit dissemination system both horizontally and vertically.

Formative inputs for the formulation of the above mentioned guidelines have been discussed in CHAPTER III of this study report.

Second : The institutionalization of knowledge and skills needed in BDH development, as contained in the book of BDH implementation guidelines,

are to be undertaken through logically and systematically arranged action training activities.

Specific sets of training modules, respectively designed for BDH policy and decision makers, for BDH implementation program makers, and for BDH field extension and training workers; for local governments' technical and non-technical agencies whose cooperation and teamwork are crucial to the success of BDH achievement; are to be on timely formulated.

Sets of training modules for BDH intended target beneficiaries distinctively differentiated by their domiciles are also to be formulated in close cooperation and teamwork with local technical agencies.

The training is to be undertaken utilizing, as much as possible, action-training system that takes into account, real needs and existing capabilities and capacities of the trainees.
At initial stages, training for BDH top, middle and lower management organizational staff is not to be undertaken by means of cascade training methodology to insure effective and efficient transfer of knowledge and skill.

Third : Integration of BDH activities and integration of other non-BDH projects operating within and around BDH project sites are to be appropriately encouraged, established and institutionalized. Coordination of functions of BDH and local agencies/institutions directly related to BDH, are to be instilled.

Coordination of functions, and integration of activities, will help increase productivity of resources, ensure continual and sustainable operation, maintenance and development of BDH outputs, facilitate speedy realization of BDH purposes and goals, simultaneously avoid duplication and replication of unnecessitated activities and fund, and conflicting interests.

Fourth : To enhance effective and efficient utilization of BDH available inputs during the conversion process of them into stipulated BDH outputs, to insure continuity and sustainability, diffusion and dissemination of BDH activity, experience and benefits, the BDH is to be made an integral part of local development program, either district or provincial.

District and provincial development coordination forums are to be optimally and consistently used as vehicles to get physical and non-physical support crucial for the acceleration of BDH purposes and goals realization.

Fifth : Two-way management information system facilitating corrective measures for improving BDH policies, approaches, strategies ; organization, administration management systems; support delivery system; and BDH activity experience and benefit dissemination system, even BDH executing human resources, is to be easily understood and applied.

Incentive and disincentive systems encouraging BDH actors to perform their tasks and function in a correct manner are to be formulated based on acceptable standards and criteria of achievement.

Sixth : The volume of fund for BDH long-term, five-year and annual project activities are to be determined in close conjunction with volumes of forest exploitation production as clearly stated in the long-term, five-year and annual forest exploitation plans. This decision will greatly facilitate BDH implementation programmers and BDH field facilitators and motivators in formulating their respective action plans.

Seventh : Certainty, confirmation of certainty, and protection of BDH target group rights for property ownership and /or management consistently honoured and addhered to; freedom from fear and dangers; self-esteem, self-help capacity, self-reliant capability on the part of BDH target beneficiaries, will considerably contribute to the sustainability of their active participation in BDH project activities.

CHAPTER V

ACKNOWLEDGEMENT

The study titled "ENHANCING THE ROLES OF LOCAL COMMUNITIES IN THE DEVELOPMENT OF FORESTRY RESOURCES through HPH BINA DESA HUTAN" shows that established and sustained active participation of the target beneficiaries, intra-BDH program and inter-project coordination of functions, cooperation and teamwork of activities are highly dependent upon the appropriateness of BDH policies and initiatives, consistent application of them, and BDH managers' commitment.

The study results described in CHAPTER I, II, III, and IV is the outcome of optimal performance of the consultant team of PT Ardes Perdana, considering problems and constraints met with in the study process. The consultant team do not have any pretension of knowing all and consider this study result as one of the considerably many inputs needed in the formulation of BDH program or rather as an entry-point of it.

The consultant team, humbly, express their gratitude and appreciation for all assistance kindly and spontaneously offered by the Bureau of Planning, the Directorate Generals of Forest Utilization, Reforestation and Land Rehabilitation; Research and Development, Education and Training, Divisions within the Ministry of Forestry; Forest Concession Rights Enterprises; USAID, ITTO, BAPPENAS; Regional Offices of Forestry Department, Provincial Forestry Agencies, BAPPEDAS of West Kalimantan and Central Kalimantan Provinces, Tanjungpura University, and members of communities participating in BDH projects.

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13. Reports On :

1.3.1. The Bangladesh Rural Development Projects.

1.3.2. The Social Work And Research Center, India.

1.3.3. MARSILA, Rural Pressure In The Philippines.

1.3.4. The Asian Experience In Agricultural Extension. Simposium Of World Bank and UNDP.

1.3.5. The Rural Environment Development Projects. Prof. Hasan Poerbo.

1.3.6. Ayni Ruway / Cultural And Economic Development Projects in Bolivia.

1.3.7. The Salvadorian Communal Union, El Salvador.

1.3.8. Haitian-American Community Help Organization.

14. Geographic Information Systems For Rural and Regional Development.
Jeffry Fox and Jonathan Chow/East-West Center.

15. Village Technology Handbook.
Volunteers In Technical Assistance.

16. Why Africa Could Not Feed Herself.
Discussion Paper; Erstminger, 1989.

17. Materi Pedoman Tehnik Pemugaran Lingkungan Desa / Village Environment Rehabilitation Technical Guideline.
DITJEN Cipta Karya, Ministry of Public Works.

STUDY TITLE: ENHANCING THE ROLES OF LOCAL COMMUNITIES IN THE DEVELOPMENT OF FORESTRY RESOURCES.

1. Background

The Ministry of Forestry (MoFr) is pursuing policy targets in three general areas: production, protection and participation. The participation policy is "to insure the proper consideration of views and expertise of all people affected and involved in forest-related activities". It has increasingly been recognized in Indonesia and elsewhere that in areas where there is significant pressure on forest resources from local communities, the integration of community development with forest management can produce major benefits for both the local community and the conservation of forest resources. The Ministry of Forestry has recently called for increased local community participation in the development and management of forest resources. In particular, The MoF requires that all forest concession holders have a "Bina Desa" or community development program with at least one community within or adjacent to each forest concession. Given that the MOF is in the early stages of developing and implementing the HPH Bina Desa program, a thorough analysis of the concept of HPH Bina Desa and implementation guidelines is timely.

The implementation of the Bina Desa program requires both overall policy guidance as well as technical guidelines. Thus, there is an urgent need for low-cost, replicable approaches aimed at promoting sustainable community development through the Bina Desa program. This guidance must also address the institutional and administrative challenges in managing forest resources for commercial use and for local community use. The MoF has given the responsibility for implementing the Bina Desa program to forest concession holders, whose primary interests and expertise are in commercial forestry. In general, forest concession holders do not have an expertise or experience in promoting sustainable community development/agroforestry development. There is preliminary evidence that even with a forest concession holder that has the commitment to implement a Bina Desa program, implementation efforts can be improved. Concessions simply, and very naturally, do not have organizational strengths in sociology, community participation, agroforestry, small-scale income-generation, anthropology and other aspects important to effective community development efforts. Therefore, there is a need for additional guidance on the overall policy and implementation of the Bina Desa program.

2. Objectives

The general purpose of this study is to improve the implementation of the HPH Bina Desa program by reviewing the conceptual framework of HPH Bina Desa program and by providing technical guidance to the Ministry of Forestry and forest concession holders. There

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are two specific objectives: (a) to identify critical issues and steps needed to support the implementation of Bina Desa programs in Indonesia, with priority focus on West and Central Kalimantan and (b) to develop and test a model training program with a participating forest concession holder in West or Central Kalimantan.

3. Outputs

The study will produce the following expected outputs:

a. A brief review of the concept of the HPH Bina Desa program and "lessons learned" from related community development/agroforestry development programs in Indonesia and Asia.

b. An outline of critical steps recommended for improving the implementation of the Bina Desa program, including: training needs, additional studies, and alternative institutional/administrative approaches.

b. A pilot training course for forest concession holders to assist them in implementing the Bina Desa program.

c. A workshop in Pontianak and a workshop in Jakarta to present the findings of the study and to solicit comments and suggestions from the participants.

4. Tasks

The contractor will undertake the following tasks:

a. Study the concept of the HPH Bina Desa program and prepare a brief review of the program's objectives and description.

b. Based on literature and interviews, review relevant experience in community development/agroforestry development applicable to Indonesia, and especially in West and Central Kalimantan. Prepare a brief summary of relevant experience, focussing on lessons learned in community development/agroforestry development.

c. In close consultation with the MoF, visit about ten selected forest concession holders with ongoing Bina Desa programs in order to assess implementation progress and identify areas for improvement. Visit the Bina Desa programs at PT. Sari Bumi Kusuma (PT.SBK) and PT. Kurnia Kapuas Plywood (PT.KKP), in West and Central Kalimantan to learn about training activities supported by the Natural Resources Management project. Prepare a brief review of progress and areas for improvement.

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d. Select a forest concession holder interested in participating in the development of a pilot training course to support the implementation of the Bina Desa program. Design and implement, on a test basis, a two-week training course aimed at supporting the implementation of Bina Desa programs in Indonesia, and especially in West and Central Kalimantan. This course will include techniques and activities on: (a) understanding and building upon the local community's social/administrative structure and culture; (b) helping participating farmers identify priority development needs; and (c) helping farmers to identify and implement low-cost and replicable development activities, such as income-generating activities and agroforestry.

e. Prepare a brief report identifying priority needs to support the implementation of the Bina Desa program in Indonesia, and especially in West and Central Kalimantan, including alternatives/improvements in institutional and administrative arrangements.

f. Organize and present the findings of the study and pilot training course for officials from the Ministry of Forestry, BAPPENAS, ITTO and USAID at a one-day seminar in Pontianak and a one-day seminar in Jakarta.

g. Prepare and discuss a detailed workplan for the study/training course with key officials at MoFr and USAID/Jakarta. Revise the workplan accordingly.

5. Reports

The major outputs of this study will be the policy implications of the "lessons learned", priority needs to improve the implementation of the program and a pilot training course. Specific reports include:

Training Course

A two week training program will be developed and tested for a participating forest concession holder. Thus, within seven weeks of signing the contract, the contractor will submit a draft training course with an explanation of training needs to the MoF and USAID. The contractor will submit five copies of the draft training course to the Head, Bureau of Planning, MoF and three copies to the Natural Resources Management Project Officer at USAID. The contractor will allow six working days for comments and suggestions. The draft course will include: an assessment of training needs, course objective, training methodology and expected outputs of participants.

Draft Report

The contractor will submit five copies of the draft report to MoF and three copies to USAID within eleven weeks of signing the contract. The draft report will include: (a) a brief summary of conceptual framework of the HPH Bina Desa program and relevant experience in

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implementation, focussing on lessons learned in community development/agroforestry development; (b) an outline of critical issues and steps recommended for improving the concept and implementation of Bina Desa program, such as training needs, additional studies, and alternative institutional/administrative approaches; and (c) the model training course and summary of the training experience. This will include an evaluation of the impact on Bina Desa activities as well as a discussion of successes and problems in executing the training and how such problems were addressed.

After receiving comments from MoF and USAID (the contractor will allow six working days after delivery of the report), the contractor will hold a seminar in Pontianak and in Jakarta to present the study's findings. The contractor will incorporate comments/suggestions into the final report.

Final Report

The contractor will submit 15 copies of the final report (10 in Indonesian and 5 in English) to the MoF within 14 weeks of signing the contract.

6. Contractor Qualifications/Requirements

The contractor must possess a demonstrated capability and experience in community forestry and community development programs, including evaluation, training and implementation skills. The expertise and competence of the principle personnel must be in community development, social science and community forestry.

7. Logistics

The contractor is responsible for all logistics.

8. Roles and Responsibilities

The contractor will work under the overall supervision of the Head of the Bureau of Planning or his designee. Additional technical direction will be provided by MoF and USAID staff.

9. Level of Effort

Two specialists (community development/social science and community development/agroforestry) are required for three person months each. Nine person months of staff assistance is also required.

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10. **Duration**

The total duration of the contract will be 3.5 calendar months.

11. **Evaluation Criteria**

A.	Technical Approach		45%
	Understanding of concept of HPH Bina Desa	-10%	
	Understanding of development need	-10%	
	Technical viability of approach	-10%	
	Innovative approach	-15%	
B.	Contractor's Experience in this area		25%
C.	Qualification of Proposed Personnel	30%	
	Educational Background	-15%	
	Relevant Experience	-15%	
	TOTAL		100%

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USAID
JAKARTA

UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT

No. Surat: II/1499
9 September 1993

Yth. Ir. Harsono
Kepala Biro Perencanaan
Departemen Kehutanan
Gd. Manggala Wanabakti
Blok I Lantai 3
Jl. Gatot Subroto
Jakarta Selatan

Perihal : Proyek Natural Resources Managament (NRM)
Draft Laporan Akhir PT. Ardes Perdana

Dengan hormat:

Pertama-tama kami mohon maaf tidak dapat menghadiri pembahasan penilaian draft laporan PT. Ardes Perdana tanggal 3 September di Manggala Wanabakti, karena undangan baru kami terima tanggal 7 September. Namun demikian, kami sampaikan komentar atas draft laporan tersebut sebagai masukan untuk perbaikan laporan akhir.

Adapun komentar kami adalah sebagai berikut:

1. Draft laporan akhir ini tidak banyak berubah dari inception report yang telah dibahas terdahulu. Penambahan dilakukan oleh konsultan dengan melengkapi lampiran-lampiran. Masukan-masukan dari peserta rapat pembahasan interim report tidak banyak ditampung. Perbaikan dalam 'body' laporan sangat minimal. Laporan masih mendeskripsikan konsep Bina Desa Hutan (BDH) yang dibagi dalam aspek-aspek berlainan, dan dibahas dalam Bab-Bab.

2. Sistematika penyajian laporan perlu diperbaiki. BAB I sampai BAB IV lebih bersifat deskriptif. Tidak ada satupun Bab khusus yang menyajikan analisis tentang: konsepsi Bina Desa Hutan dan hasil observasi lapangan, dan mengaitkan keduanya untuk melihat kelemahan-kelemahan konsep ataupun pelaksanaan di lapangan (diminta sebagai output 3.a dalam TOR). Sebagai bahan pertimbangan, kami mengusulkan agar sistematika laporan disusun menjadi sebagai berikut:

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AMERICAN EMBASSY, JL. MEDAN MERDEKA SELATAN No. 3 - 5, JAKARTA 10110 - INDONESIA
TELEPHONE: (021) 360360 FAX: (021) 3806694

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a. Pembahasan latar belakang, konsepsi, batasan dan peraturan mengenai Bina Desa Hutan (Bab I dan II),

b. Kasus-kasus pelaksanaan BDH di lapangan, lessons learned diambil dari sepuluh pemegang HPH, seperti diminta pada Task 4.c dalam TOR (dibahas dalam Bab III).

c. Analisis terhadap pelaksanaan BDH di lapangan bila dikaitkan dengan konsepsi dan kerangka peraturan pelaksanaannya (Bab IV),

d. Rekomendasi konsultan, yang disusun menurut urutan prioritas, untuk memperbaiki konsep ataupun pelaksanaan lapangan program BDH, termasuk program pelatihan (Bab V).

3. Pengalaman lapangan dan lessons learned yang menjadi titik sentral dalam studi ini, seharusnya dibahas dalam satu Bab tersendiri (Bab III). Dalam laporan, bagian ini merupakan lampiran tersendiri di belakang, dengan judul: Kegiatan HPH Bina Desa Hutan di Propinsi Kalimantan Barat dan Kalimantan Tengah. Dengan demikian, lampiran ini kurang mendukung laporan utama karena tidak secara langsung terintegrasi dalam analisis.

4. Bab terakhir (Bab V) dari laporan seharusnya menyajikan kesimpulan dan rekomendasi sebagai hasil analisis dari Bab-bab sebelumnya. Laporan ini tidak menyajikan rekomendasi yang jelas, singkat dan sistematis seperti diharapkan sebagai Output 3.b dalam TOR. Bab V dalam laporan ini hanya Daftar Pustaka. Pada umumnya, Daftar Pustaka bukan merupakan satu Bab tersendiri.

5. Konsultan belum melakukan penyusunan prioritas yang diperlukan untuk mendukung pelaksanaan program BDH di Indonesia, seperti dimintakan dalam Task 4.e. Prioritas ini penting sebagai masukan kepada Departemen Kehutanan untuk memperbaiki kebijakan dalam program BDH, baik sebagai ujicoba program ataupun studi lanjutan.

6. Dalam Lampiran Pelaksanaan Pilot Training Course HPH Bina Desa, konsultan menyajikan data perkembangan HPH Bina Desa Hutan. Namun data ini seolah-olah berdiri sendiri, karena tidak ada interpretasi dan analisis yang mengikutinya. Untuk apa?

7. Dalam TOR (halaman 3, butir 5. Reports) diminta secara khusus bahwa konsultan menyusun program pelatihan dua minggu. Draft program ini (dilengkapi dengan analisis kebutuhan/needs assessment), diajukan kepada Departemen Kehutanan dan USAID, lalu dalam jangka waktu 6 hari kerja, Dephut dan USAID harus memberikan komentar dan persetujuan atas draft program latihan ini. Sampai sekarang, tugas ini belum dijalankan oleh kontraktor.

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8. Apakah konsultan sudah menyiapkan laporan dalam Bahasa Inggris seperti diminta dalam TOR halaman 4: Final Report?

Demikian komentar dari kami. Kami mengharap agar kontraktor dapat memperbaiki laporannya supaya lebih sesuai dengan TOR. Apabila ada kesulitan-kesulitan yang dialami dan usaha-usaha pemecahan yang telah dilakukan oleh kontraktor dalam menyelesaikan studi ini agar dipaparkan dengan jelas dalam laporan, sebagai bahan pertimbangan reimbursement oleh USAID, dan sekaligus masukan dalam menyusun studi serupa di masa yang akan datang.

Terima kasih.

Hormat kami,

Agus Widianto
Program Specialist
USAID/NRM

Tembusan:
1. Dr. Herman Haeruman, BAPPENAS
2. Dr. Dedi M. Riyadi, BAPPENAS
3. Ir. Kristanto, Ketua Tim Penilai
4. Dr. Colin MacAndrews, COP-ARD/NRMP
5. Dr. Chris Bennett, ARD/NRMP
6. Drs. Rachlan, PT. Ardes Perdana Consultant

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DEPARTEMEN KEHUTANAN

SEKRETARIAT JENDERAL

PROYEK PENGEMBANGAN PERENCANAAN KEHUTANAN

RISALAH SEMINAR PEMBAHASAN DRAFT FINAL REPORT STUDI PENINGKATAN PERAN MASYARAKAT SETEMPAT DALAM PENGEMBANGAN SUMBER-DAYA KEHUTANAN MELALUI PROGRAM HPH BINA DESA HUTAN (THE NRM PROJECT)

I. PENDAHULUAN

Seminar diselenggarakan di Ruangan Rapat Utama, Gedung Manggala Wana Bhakti, mulai jam 10.00 sampai dengan jam 12.20, di bawah pimpinan Bapak Staff Ahkli Menteri Kehutanan II, dikhadiri oleh 46 (empat puluh enam) orang peserta utusan dari BAPPENAS; Direktorat-Direktorat Jenderal, Biro, Balai Penelitian dan Pusat Pendidikan dan Latihan dalam Lingkungan Departemen Kehutanan; Masyarakat Perkayuan Indonesia, Pemegang Hak Pengusahaan Hutan, International Timber Trade Organization; USAID dan ARD, dan PT Ardes Perdana.

II. RISALAH SEMINAR

1. Bapak Pimpinan Seminar:

Menyatakan terima kasih kepada khadirin yang telah memenuhi undangan untuk membahas Draft Final Report Studi Peningkatan Peran Masyarakat Setempat Dalam Pengembangan Sumber-Sumber Daya Kehutanan melalui Program HPH Bina Desa Hutan/BDH. BDH dimaksudkan untuk mengentaskan kemiskinan, khususnya di kalangan masyarakat di dalam dan sekitar hutan, sebagai salah satu program garapan prioritas PJPT II. Memohon para peserta menyampaikan gagasan, pendapat, kritik, dan masukan-masukan pelengkap untuk menyempurnakan Draft Final Report Studi agar hasil studi dapat diterapkan secara efektif dan efisien sehingga BDH mampu mencapai tujuannya dalam jangka waktu yang relatif singkat.

Mempersilakan tim konsultan /PT Ardes Perdana untuk menyampaikan hasil studi yang telah dilaksanakan secara singkat tetapi jelas.

2. **Tim Konsultan:**

Menjelaskan secara singkat latar belakang studi, metodologi studi, hasil-hasil studi yang dituangkan dalam Draft Final Report, temuan-temuan lapangan yang dijadikan masukan dalam penyempurnaan Report, ditutup dengan saran-saran untuk semua fihak yang terlibat dalam program BDH. Mengharapkan hal yang sama seperti yang dikemukakan pimpinan sidang, dari khadirin.

3. **Respons Peserta Seminar**

3.1. Bapak Yahya/PT Tanjung Raya Timber:

Menyatakan bahwa:

a. Perusahaannya menyadari pentingnya pencapaian kesejahteraan masyarakat setempat sebagai tujuan BDH dengan pengembalian sebagian keuntungan yang diperoleh dari pengusahaan hutan;

b. Perlu adanya arahan rinci mengenai manajemen BDH dari Departemen Kehutanan.

c. Instruksi-instruksi dari Departemen Kehutanan dan kewajiban-kewajiban yang harus dipenuhi perusahaan HPH jangan sering berubah-ubah tetapi harus konsisten.

3.2. Bapak Rusnadi Ridwan/BAPPENAS:

a. Menyatakan bahwa:

a.1. Peranserta aktif masyarakat dalam PELITA VI dan PJPT II akan dikembangkan dalam kegiatan berbagai sektor pembangunan, termasuk kegiatan pemantauan dan evaluasi sebagai independent control mechanism.

a.2. Perlu segera dipikirkan kegiatan-kegiatan follow-up dari hasil studi yang telah dilaksanakan, oleh Departemen Kehutanan.

b. Mempertanyakan:

b.1. Cara-cara yang akan ditempuh dalam penerapan independent control itu, dan

b.2. Tindakan-tindakan yang akan diambil sebagai follow-up dari studi, oleh Departemen Kehutanan.

3.3. Bapak Agus Widianto/USAID:

a. Menyatakan bahwa latihan perlu dititik beratkan pada pelaksanaan pada tingkat masyarakat dan LSM.

b. Mempertanyakan kemungkinan penyerahan dana untuk program BDH dari perusahaan HPH dimasukkan ke dalam Anggaran Pendapatan dan Belanja Daerah Pemerintah setempat.

3.4. Bapak Haryono/PT Dwima Jaya Utama

Menyatakan bahwa konsep dasar pelaksanaan HPH oleh setiap perusahaan HPH berbeda-beda. Dwima Jaya Utama memprioritaskan garapannya para bidang pendidikan.

3.5. Ibu Liliana/Widyaiswara;

Menyatakan bahwa perlu kerjasama petugas lapangan HPH dengan Penyuluh Lapangan Pertanian/PLP dan Penyuluh Penghijauan Lapangan/PPL dalam pembinaan dan bimbingan petani peserta BDH, dan perlu dilaksanakan tindakan-tindakan agar kelompok sasaran mampu mandiri. Untuk maksud ini pernah dilaksanakan kursus latihan Kader Tani Menetap/ KANITAP.

3.6. Bapak Naloken Ginting / Peneliti:

Menyatakan bahwa kelemahan utama dalam kegiatan pembangunan adalah kurang memadainya kemampuan membuat perencanaan yang jelas dan logis. Kelemahan lain adalah daya adopsi teknologi oleh masyarakat yang berbeda-beda karena perbedaan latar belakang budaya.

3.7. Bapak Susatyo/Direktorat Jenderal Pengusahaan Hutan:

a. Menerima dengan baik hasil studi dan saran-saran yang dikemukakan tim konsultan.

b. Menyatakan bahwa:

b.1. Telah ada hasil sebuah studi diagnostik yang akan dibicarakan dalam jangka waktu dekat ini yang akan disusul dengan rencana kegiatan follow-up-nya.

b.2. Pelaksanaan program BDH berdasarkan hasil studi diagnostik direncanakan dimulai tahun anggaran 1994/1995.

b.3. PERUM PERHUTANI/INHUTANI merencanakan untuk menyisihkan sekitar 2 sampai 5% dari keuntungan perusahaan HPH-nya untuk pelaksanaan program BDH.

3.8. Bapak Duryat/Widyaiswara:

Menyatakan bahwa:

a. Dari studi yang dilaksanakan PT Ardes Perdana terlihat bahwa keperdulian terhadap masyarakat miskin setempat telah meningkat menjadi keprihatinan. Masalahnya adalah bagaimana mengubah keprihatinan menjadi rencana; rencana menjadi karya nyata, karya nyata menjadi darma.

b. Jeneralisasi sebaiknya dihindarkan, sebaliknya spesifikasi lokalitas perlu diprioritaskan.

c. Action training harus didasarkan pada action plan, dan action plan didasarkan pada action research.

d. Diseminasi horisontal yang dilaksanakan oleh key person setempat akan lebih berhasil dari pada oleh orang luar/pendatang.

e. KANITAP dan Orientasi Usaha Tani Menetap/ORUM disarankan untuk diterapkan dalam program BDH.

f. Akar dari partisipasi adalah empati yang berkembang menjadi simpati dan berkembang lagi menjadi kebiasaan take and give. Partisipasi tidak bisa diperintahkan.

g. Kemampuan adopsi teknologi oleh masyarakat menjadi landasan kemampuan difusi/penyebar-luasan.

4. Bapak Pimpinan Seminar:

Menyatakan terima kasih dan penghargaan kepada para peserta yang telah menyampaikan tanggapan, pendapat dan saran-saran masing-masing.
Mempersilakan tim konsultan untuk menganggapi masukan dari para peserta.

5. Tim Konsultan:

Menyatakan bahwa:

a. Rencana kursus latihan mengenai aspek-aspek program BDH untuk selama dua minggu seperti tercantum dalam Kerangka Acuan Studi tidak jelas pesertanya. Studi memperlihatkan bahwa ternyata pengetahuan dan keterampilan menerapkan pengetahuan mengenai aspek-aspek program BDH perlu dikuasai oleh:

a.1. Kelompok sasaran utama, yaitu:
- Masyarakat di dalam,
- Masyarakat di perbatasan, dan
- Masyarakat di sekitar,
daerah kerja perusahaan HPH.

a.2. Kelompok sasaran antara, yaitu:
- Jajaran Departemen Kehutanan,
- Jajaran Perusahaan HPH, yang
masing-masing memiliki tingkat:
- Policy makers/top management
- Programmers/middle management, dan
- Pelaksana lapangan/lower management

a.3. Kelompok sasaran potensial, yaitu:
- Jajaran Pemerintah Daerah termasuk dinas / instansi / lembaga teknis dan non-teknisnya yang masing-masing memiliki tingkat top, middle, lower management, dan
- Masyarakat pedesaan yang tidak menjadi kelompok sasaran utama program BDH.

Pertanyaannya: Rencana Latihan Kursus selama 2 minggu yang harus dibuat itu untuk kelompok sasaran yang mana dan untuk tingkat manajemen yang mana?

b. Memasukkan dana untuk pelaksanaan program BDH ke dalam APBD Pemerintah Daerah ditolak oleh Pemerintah Daerah sendiri. Alasan yang dikemukakan di antaranya:

b.1. Bertentangan dengan Forestry Agreement
b.2. Pemerintah Daerah sudah berat dengan program/ proyek yang telah ada;
b.3. Pemerintah Daerah mempunyai prioritas garapan yang mungkin berbeda dengan prioritas program BDH.
b.4. Pemerintah Daerah menolak menerima warisan kesulitan-kesulitan yang diakibatkan perilaku fihak luar.

c. Semua tanggapan dan saran dari peserta seminar telah tercantum dalam Draft Final Report Studi. Tim konsultan menyatakan terima kasih untuk kesemuanya itu.
Tanggapan, pendapat dan saran-saran yang disampaikan ternyata membenarkan materi laporan PT Ardes Perdana.

Diketahui

(Ir. Petrus Gunarso)
Sekretaris Rapat
NIP.: 080063188