

1.0 INTRODUCTION

1.1 Background

Through the years, the forestry sector in the Philippines continuously declined in physical, economic and environmental terms. Most of the country's once rich forests which generated substantial revenues to the government and the society are now gone. Such decline has been largely attributed to a number of inadequate and poorly-implemented forestry policies. These policies led to the rapid exploitation of timber from virgin forests at prices far below real market values. The proliferation of only short duration timber licenses in the past discouraged long term investments in forest development and dampened private sector initiatives. Forest destruction rose to very alarming levels while forest recovery through natural and artificial means never coped with the forest destruction rate. Furthermore, the institutions mandated to implement forest policies to address all these problems had not been equipped to fully address the situation. Meanwhile, the social settings in the uplands and forest adjacent communities continue to exert pressure on natural resources and made the tasks of conserving the forests more difficult. The very high incidence of poverty in the uplands continues to exacerbate environmental degradation problems.

In response to the rapidly declining conditions of the country's forest resources, the Philippine Government through the assistance of Asian Development Bank (ADB) and the Finnish International Development Agency (FINNIDA), formulated a 25-year Philippine Master Plan for Forestry Development (MPFD) in 1989-1990. The master-planning work was carried out jointly by DENR and a team of specialists managed by the Jaakko Poyry Oy of Finland and MADECOR of the Philippines. The MPFD was accepted and approved by the Philippine Cabinet in June, 1990. It consists of three umbrella programs and fifteen major programs designed to revitalize the Philippine Forestry Sector back to its former significant role in national development. Formulation of Regional forestry development plans ensued, and was followed by formulation of a medium term plan for 1993-1998, all of which were completed in 1992.

The Department of Environment and Natural Resources (DENR) has the primary responsibility in implementing the MPFD. Of the 15 major programs of MPFD, domestic and international support were concentrated on two: a) the People-Oriented Forestry Program (POFP) which evolved into Community-Based Forest Management (CBFM) Program and b) Biodiversity Conservation, which became the foundation of the Integrated Protected Area System (IPAS). A 1999 UNDP fact-finding mission on preliminary review also noted successes of MPFD in selected areas. However, several major programs did not progress as projected. The DENR struggled and failed to get the needed support for the successful implementation of the Plan. The failure of the proposed bill on "sustainable forest management" to be passed into law further kept the DENR from pursuing aggressive sustainable forest management strategies because of lack of enabling forest policy in the sector.

Finally, since the MPFD was formulated, several new developments and concerns have emerged in forestry, both in the local and international fronts. These issues now affecting forestry in the country were unforeseen at the time MPFD was formulated. Among these are the following: a) forestry and land-use implications related to climate change; b) forest certification; c) development and implementation of criteria and indicators for sustainable forest management; and, d) increasing recognition of the role of forests and forestry in poverty eradication and support of sustainable livelihood, among others. The review of MPFD implementation conducted by UNDP mission also noted several weaknesses and aspects of the Plan that had become less relevant in guiding the country's forestry activities. The mission recommended the review and revision of MPFD taking into consideration the changed environment and priorities in the Philippines and other emerging trends in local and international forestry. In February, 2000, ADB hosted a forum on Philippine MPFD where an action agenda was proposed. Such agenda also called for the Government and all stakeholders to re-evaluate, revise and promote adherence to MPFD considering other emerging issues in forestry and the environment sector.

1.1.1 Project Objectives:

The project has the following specific objectives:

- a. To develop a clear framework plan for review and revision of the MPFD;
- b. To assess the accomplishment of MPFD relative to its six objectives, namely; i) conservation of the forest ecosystem and its diverse genetic resources; ii) promotion of social justice and equity; iii) placement of the country's production forests under sustainable management; iv) proper land management; v) proper management of watersheds; and, iv) contribution to employment and growth of the local and national economies;
- c. To ascertain the extent to which achievement of the MPFD's objectives has contributed to the alleviation of poverty and improvement of food security among rural poor, particularly those located in forestlands/upland areas;
- d. To re-evaluate, revise and/or update the MPFD as appropriate, taking into consideration the need for strong partnership with relevant and major stakeholders;
- e. To identify and recommend needed remedial measures, including further strengthening of policies and institutions, to hasten the full attainment of MPFD's objectives.

1.1.2 Basic Project Methodology:

The Project was carried-out using a five-step methodology as follows:

- Review of the objectives of the Master Plan for Forestry Development;
- Assessment of the achievements and extent of implementation of MPFD programs and effectiveness of supporting policies;
- Conduct of field programs reviews and stakeholders' consultations;
- Policy analysis and assessment; and
- Preparation of MPFD programs and policy revisions.

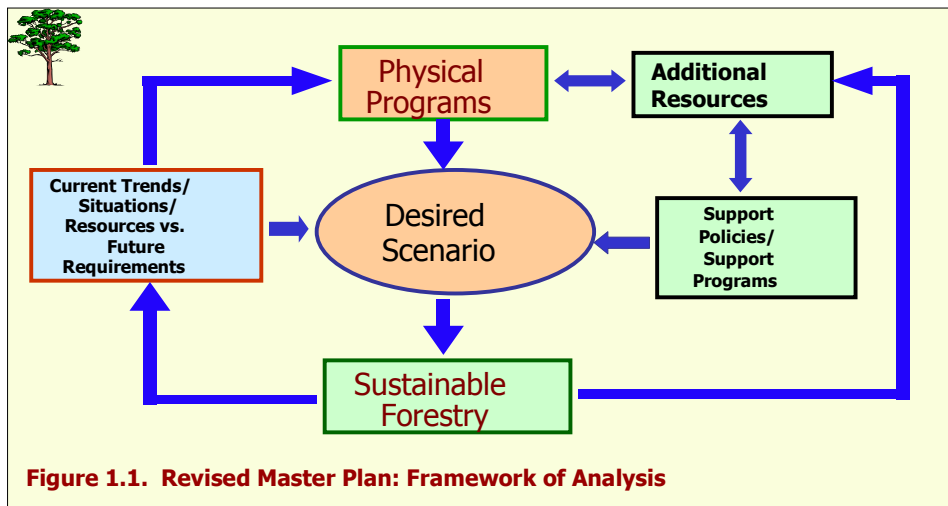
The SPPD project team members worked hand-in-hand with a counterpart FMB staff. Other organizations, i.e. SEARCA and TREES, Inc., were contracted to assist and do facilitation services in the conduct of regional workshops and consultations and in the conduct of special studies related to overall assessment of forestry accomplishments under MPFD.

Basic to the overall process of project implementation is consultation with various stakeholders. Emphasis was given to this participatory approach where a great majority of different stakeholders in the sector was consulted.

The identification of subsector strategies involved the following major activities:

- identification of specific policy requirements that must support related program thrusts and directions, and must address and prioritize the various issues raised during workshops, consultations and field validations
- identification of resource requirements
- analysis of strategic impacts
- anticipated constraints, mitigating strategies
- specific institutional and human resources development directions

Below (Figure 1.1) is the overall framework for the Master Plan project implementation.



1.1.3 Basic Strategic Program Thrusts and Directions of Revised MPFD

Given the situations and desired scenarios of the different forestry subsectors, revised strategic directions were formulated. This process relied significantly on the issues, comments, and suggestions raised in various papers presented during regional consultations and workshops. Among the pre-identified strategic program thrusts and directions explored are as follows:

- Addressing the vicious cycle of forest degradation and upland poverty
- Enhancing watershed integrity and its capacity in sustaining supply of goods (wood, water, food, shelter, medicine, etc.) and enhancing delivery of environmental services
- Enhancing private investments, viability and economic contributions of forest-based industry
- Promoting forest science in forestry, and rationalizing forestry education and extension
- Ensuring productive participation of various stakeholders and equitable sharing of benefits
- Institutional streamlining and capacitation

The overall planning framework/strategy was anchored on the watershed and ecosystem management approach as overarching principle in forest resources management. Among the considerations emphasized under this framework is the adoption of a management planning tool which has the flexibility to incorporate unique features and other exigencies of the watershed and the institutions managing them. Basic to this is a comprehensive resource assessment at all field level offices for planning and management purposes and adoption of practical operational systems for putting every ha of forest land into definitive management system (under SDUs), each with accountable land manager, equipped with the proper knowledge and tools for effective resources management.

1.1.4 Policy and Legislation

An assessment of the general policy situation was conducted together with the important factors that hinder the effectiveness of forest policies. Policies or rules for that matter, become weak if they have defects, whether structural or formulation related. Defects contributory to weak policy implementation were examined together with the policy opportunities and constraints that worked positively or negatively to the sustained development of the sector. Likewise, the project drew policy suggestions from the sector itself through the regional consultations/workshops conducted, and based

on initial analysis already made or based on the observations of those who are directly implementing or are affected by forest policies and decisions.

1.1.5 Monitoring and Evaluation

An assessment of the current M & E systems was conducted. The team examined requirements for the M & E to be a practical and effective tool in ensuring success of policies, programs and projects and in improving decision making potency to improve the chance of success of all programs implemented by the sector. It explored practical M & E frameworks for different levels of decision making, featuring a tapering information volume for the consumption of different hierarchical levels (e.g., CENRO, PENRO, REGION, and CO). The Team also examined the national criteria and indicators for forestry and the potentials and merits of forest certification to be made the as backbone of a strong M & E component in every sectors activity. Furthermore, it looked at how sub-sectoral M & Es could be designed to improve feedback processing and ensure effective communication system within the sector.

1.2 The 1990 Master Plan for Forestry Development

Through a technical assistance from Asian Development Bank and the Finnish International Development Agency, the 1990 Master Plan for Forestry Development was prepared primarily to guide the long-term development of the forestry sector in the Philippines. The work was carried out by DENR jointly with a team of specialists managed by the Jaakko Poyry Oy of Finland and MADECOR of the Philippines. The planning exercise adopted a participative strategy through extensive consultations with the sectors' stakeholders. The Plan was sought to be institutionalized within DENR and other concerned agencies. The draft was subjected to a multi-sectoral review, as well as to in-house review by DENR's top executives from the central and regional headquarters.

The 1990 Philippine Master Plan for Forestry Development (1990 MPFD) spelled out the goals and objectives of the country's forestry sector; the development programs designed to meet the objectives set; the resources required to implement the programs; and the scenarios and impacts envisaged as the results of program implementation. It was designed to point the long term direction of the forestry sector, and to draw the support needed to move the sector into the prescribed direction.

1.2.1 Importance of the Forestry Sector

The 1990 MPFD highlighted the significance of the forestry sector as a centerpiece of the country's natural resource base and ecosystems. Although the sector's contribution to the national economy has been declining, its continued development and that of the environmental sector is a prerequisite to a sustained growth in agriculture and industry. Besides, forest lands are the main watersheds of rivers which provide water for various uses. Soil erosion and hydrological deterioration of these watersheds caused losses in productivity and utility of infrastructures. The total off-site and on-site costs of forest degradation was estimated at P11.6 billion annually. The Plan also highlighted the contribution of the sector to the economy in terms of gross value added, export revenues, full-time job creations, and the provision of biomass fuels, among others. However, there were many threats to forest resources identified, among which are: the tremendous pressure from an increasing population in search of land to till and in need of wood, the over-exploitation of timber resources, and inadequate forest development, management, and conservation efforts.

1.2.2 General Objectives

The general objectives of the Plan are:

- Meet the needs for wood and other forest products by placing all the country's production forest under sustainable management,

- Contribute to the production of food, water, energy, and other needed commodities by properly managing the upland watersheds.
- Protection of the land and its resources against degradation and ecological devastation through proper land management systems and practices.
- Conservation of the forest ecosystems and their diverse genetic resources.
- Contribute to employment and growth of national and local economies through fully developed forest-based industries.
- Promotion of social justice and equity and the recognition of the rights of indigenous cultural communities (ICC) in the management, conservation and utilization of forest resources.

1.2.3 Major Scenarios, 1990 MPFD

Under the Master Plan scenario, logging will be banned in the remaining old growth dipterocarp forests while allowing such in the production forests of about 2.5 million ha of second growth dipterocarp forests. Likewise, at least 100,000 ha of pine forests will remain under production. Conversely, deforestation was expected to drop gradually to almost 4,000 ha per year as the country's forests are placed in the hands of capable managers, mainly coming from communities and the private sector. Reforestation will be given a boost by increased participation of the local people after their access to the forest resources has been recognized. It is envisaged that government and private efforts will result in close to 3 million ha of plantation forests by 2015. The implementation of the Master Plan was also expected to result in the reduction of brushlands from 2.46 million ha to only 0.90 million ha; grasslands from 1.54 million ha to 0.68 million ha and the other extensive land uses from 6.59 ha to about 5.0 million ha. The reduction in these areas are projected at 3.00 million ha in 2015.

Under the wood supply scenarios, the combined log production from areas under TPSA and areas managed by local communities, was projected to increase from the current 3.2 million cu m to about 5 million m³. From the pine forests it is estimated that about 0.23 million cu m of timber and poles can be sustainably produced. Timber production from plantations is categorized as those coming from old (those established before 1990) and from new (after 1990) plantations. Wood production from the old plantations is expected to increase from the 1990 projected level of about 1.9 million m³ to about 3.5 million cu m. Under the Master Plan, the new plantations are expected to yield about 14.8 million m³ of wood including pulpwood by 2015. Despite projected increase in fuelwood from existing and new plantations and from agricultural areas, there will still be a deficit of about 14.9 million cu m. On the aggregate level, a positive supply balance of close to 14.0 million cu m was projected under the Master Plan scenario.

Regarding forest industry scenarios, the wood mechanical industry is envisaged to retool and also to establish new industries for export purposes and for community processing. It is expected that the country will not only be able to satisfy its domestic requirements for sawnwood and plywood but will also be able to export these products. A new pulpmill was seen to be established to enable the country to minimize its pulp importation.

On other expected impacts, it was expected that through legislation forest charges will be raised to reflect market prices. Stumpage price could be from 20-30% of the market price. At this price range, the government can generate immediately about P1.58 billion from harvested logs from the natural forest. With allowable cut expected to increase through the years, the government can generate as much as P2.52 billion at 1990 prices.

Employment in forest-based activities was expected to increase by about 6.4% annually. Moreover, close to 4.0 million ha land under extensive land uses such as brushlands, grasslands, and

kaingin areas will be converted to forest plantations or intensively used. It was estimated that this will result in lower rates of soil erosion, in the order of magnitude of 1.3 billion tons a year by 2015 as against the current 2.2 billion tons a year. This is equivalent to about 73 t/ha/year in 1990 to about 44 t/ha/year in 2015.

1.2.4 The Master Plan Programs

There were a total of 15 programs under the 1990 MPFD grouped under three (3) umbrella programs namely: Man and the Environment; Forest Management and Products Development; and Institutional Development.

1.2.4.1 Man and the Environment Programs

Under this umbrella program, five programs were formulated as follows:

- People-oriented forestry
- Soil conservation and watersheds management
- Integrated Protected Area System (IPAS) and Bio-diversity Conservation
- Urban forestry
- Forest Protection

1.2.4.2 Forest Management and Products Development Programs

- Management of the natural dipterocarp forests
- Management of mangroves, pines and other natural forests
- Forest plantations and tree farms
- Wood-based industries
- Non-wood forest based industries

1.2.4.3 Institutional Development Programs

- Policy and legislation
- Organization, human resources, infrastructures and facilities
- Research and Development
- Education, Training and Extension
- Monitoring and evaluation

1.2.5 Total Costs and Financing of the 1990 MPFD

The aggregate cost of the 15 Master Plan programs is P192.6 billion over the 25-year period (1991-2015). The average annual cost for the first 5-year period (1991-1995) is P7727.7 million, while the average annual cost for the entire planning period is P7713 million.

On the average, projected government financing is less than one-fourth (22.5%) of the total Master Plan costs, but program-wise, projected government financing varies from 9% to 69%.

The private sector is envisaged to participate actively in the Master Plan implementation and funding. About 32.3% of the total Plan cost is projected to be shouldered by the private sector. The bulk of the private sector financing is projected to occur in two programs: wood-based industries and plantation forests, which are carried mainly by industrial companies. Private sector financing also includes small scale operators and NGOs in people-oriented forestry and in wood and non-wood forest industries.

Foreign financial aid is seen to be vital for the funding of the Master Plan. Most if not all of the Master Plan programs are characterized by strong social dimension and equity concern, high environmental and conservation contents, and firm thrust in urgent transition to sustainable development and utilization of forest land based on economic products. The foreign financing portion for the entire 25 years covers about 45.2% of all Master Plan costs.

1.3 General Assessment of 1990 MPFD Implementation

1.3.1 Overall Forestry Sector Condition

The Philippine forestry sector is in the decline in terms of recorded contributions to the national economy and in environmental and physical terms. Most of the country's once rich forests which generated substantial revenues to the government and the society are now gone or in various stage of degradation (Table 1). Such decline is largely attributed to a number of inadequate and poorly-implemented forestry policies which led to the rapid exploitation of timber from virgin forests at prices far below real market values. Under the implementation of the Revised Forestry Code of the Philippines (PD 705) which was passed in 1975, the sector continued to decline. The proliferation of only short duration timber licenses in the past discouraged long term investments in forest development and environmentally-sound forest management practices. The unstable policy environment also dampened private sector investments in forestry. Figure 1.2 shows the problem tree for the sector embodying the chain of events that leads to its decline.

Table 1.1. Change in forest land area in the Philippines (in millions of hectares).

Y E A R	FOREST COVER	% OF TOTAL AREA
1575	27.5	92.0
1863	20.9	70.0
1920	18.9	64.0
1934	17.8	57.3
1970	10.9	36.3
1980	7.4	24.7
1990	6.7	20.7
2001	5.4	18.0

Forest destruction rose to very alarming levels while forest recovery (Table 1.2) through natural and artificial means never coped with the destruction rate. During the 1990 period, estimates by DENR (2002) placed forest destruction rate at an average of 130,000 ha annually. Furthermore, the institutions mandated to implement forest policies to address all these problems had not been equipped to fully address the situation. The failure of the efforts over the past few decades to halt the vicious cycle of deforestation, forest degradation and upland poverty has primarily been the result of inadequacies in institutional aspects particularly in policy implementation due to weaknesses in the structure of forestry sector organizations.

Meanwhile, the social settings in the uplands and forest adjacent communities continue to exert pressure on natural resources and made the task of conserving the forests more difficult. The very high incidence of poverty in the uplands continues to exacerbate environmental degradation problems. At the same time, different forest stakeholders are clamoring for more involved participation in the planning,

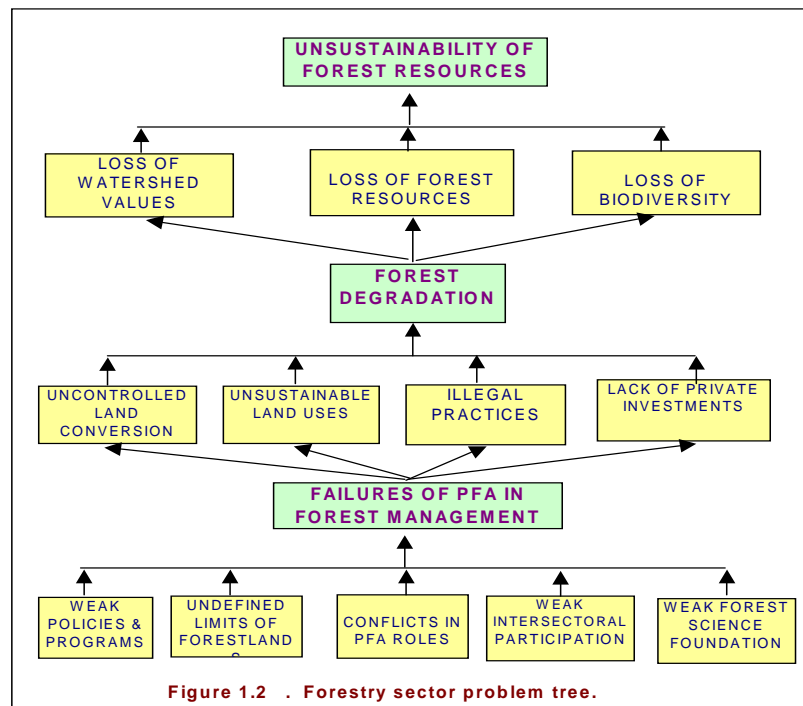


Table 1.2. Area reforested by the government and the private sectors (in '000 ha).

Year	Government	Non-Government	Grand Total
2001	26,524	4,920	31,444
2000	21,740	5,892	27,632
1999	31,184	10,983	42,167
1998	33,219	9,149	42,368
1997	49,301	16,936	66,237
1996	18,869	27,227	46,096
1995	21,841	43,392	65,233
1994	18,032	31,519	49,551
1993	6,347	12,864	19,211
1992	24,304	16,289	40,593
1991	73,602	19,437	93,039
1990	153,949	37,714	191,663
1989	89,452	41,952	131,404
1988	31,226	32,957	64,183
1987	28,843	10,986	39,829
Average	41,896	21,481	63,377

Source: F M B .

management and utilization of forest resources. The playing field now becomes the arena of many players, each wanting to say his piece in the proper management of forests, through participatory approaches. Such is a consequence of the lost of confidence to traditional forest managers and the increasing awareness on the importance of forests to the very survival of the nation. The importance of the roles of institutions is now becoming apparent and needs important attention and considerations in any policy, planning and program implementation activities designed to bring back the sector into more responsive and significant position.

In a properly functioning institution, policy is the central piece which provides the goals and the necessary directions and guidelines . Appropriate policy instruments such as the legal system, planning

and programming, budget and revenue system, support services (i.e. research and extension and information) and the sectoral organizations cover the rest of the institutional aspects. Institutional capability is reflected in the performance of the sector.

An analysis of the situation in the forestry sector of Philippines vis a vis the 1990 Philippine Master Plan for Forestry Development (MPFD) has been done, to assess the sectoral performance and to identify and highlight the weaknesses, inadequacies, problems, constraints and issues. The intention is to flush down those concerns which calls for urgent interventions, since some of the constraints have crippled the institutions and the sector as a whole.

1.3.2 Accomplishments under 1990 MPFD

One of the most visible accomplishments of the 1990 MPFD is the CBFM project which is under the People Oriented Forestry Program. Based on the program targets, there is supposed to be 3.4 M ha of forest lands under tenure until the year 2000. At present, around 5.7 M ha are under CBFM (Table 1.3). CBFM is also another program effective in closing many open access areas. Another area where the 1990 MPFD overshot its target is in the area of Protected Area and Biodiversity Conservation where around 325,000 ha were to be established under buffer zones and protected area comparing to the accomplishment of 3.2 million ha under the National Integrated Protected Area System.

Similarly, there are many positive developments under the program of Soil Conservation and Watershed Management, as there are several key accomplishments under this subsector. For example, the sector adopted the watershed and ecosystem management approach (through DAO 99-01), as the overarching principle in forest management. WEM espouses the adoption of holistic, multiple-use and sustainable management of resources within watersheds. It also involves adoption of planning tools and management strategies that promote ecology among people, resources and environment; adoption of a management system that has the flexibility to safeguard the integrity of watershed functions and system that endeavors to promote the welfare of stakeholders affected by them. Moreover, the DENR endeavored to implement several projects, e.g., FSP, ENR-Secal Project, NRMP with PSWRM and Guidelines for Watershed Management and Development, etc., which pursue soil conservation and watershed management in the purview of participatory and multisectoral involvement of different watershed stakeholders.

However, in terms of other program targets, all other programs were under-achieved in terms of physical targets. For example, there was a plan to establish 1.3 million ha of forest plantations between 1991-2000. The sector achieved around 0.68 million ha during the period for a 50% accomplishment. Moreover, the quality of these reported plantations is far from satisfactory because of the low survival rate of government initiated plantations. Another target under institutional development is the reduction of forestry schools offering forestry and allied courses from then 27 schools to 14 strategically located schools to arrest the declining quality of forestry graduates. Instead, there are now 52 forestry schools offering forestry resulting to low quality of turnouts. Table 3 shows a summary matrix of target and accomplishments under the 1990 MPFD implementation.

1.3.3 Issues/Problems/Constraints

Among the major issues, problems and constraints identified by the team relative to the implementation of 1990 MPFD are as follows: *(note: the details of the issues, problems and constraints are discussed under Section 2.0 on Subsectoral Assessment)*

- Policies and institutional arrangements
 - inadequacies of forestry sector policies; no updated forest policy to guide the sector;
 - inadequacies of legal instruments, weaknesses of organizational structure of public forest administration and management;

Table 1.3. Summary of targets and accomplishments under the 1990 MPFD.

TARGET (1990-2000)	ACCOMPLISHMENTS	REMARKS
I. Man and Environment		
3.4 mil ha under tenure under different PCFP programs	4.4 mil ha tenured, 1.3 mil ha in process	Accomplished under CBFM program
13,000 ha ANR projects	around 14,000	developed under CBFM-JBIC
63 mini forest parks established	over 480 parks already established in MM including those inside private subd.	Includes those established before 1990.
780 km of greenbelts/roadside planting	No records except for seedlings planted (2.1 mil from 1990-2002) in MM	Many of those planted have died, or replaced, removed or destroyed due to new infrastructures like road widening
Deforestation to drop to 26,000 ha annually by 2000	The rate now is around 80,000 ha/year although there are no official estimates from FMB yet	
Reduction of brushland from 2.46 to 2.04 mil ha	2,200 brushland as of 2000	brushlands are the subject of current developments under FSP
II. Forest Management and Products Development Programs		
1, 673,000 ha of PA forest estate under dipt forest established by 1995	864,000 ha declared	declared under RA 7586, but not yet delineated
Logging banned in old growth forests	Logging ban effected	Through RA 7586
2.5 M ha of permanent production residual forest	Production forest not yet delineated	Lack of funds to implement delineation, change of priorities
1.3 M ha of forest plantations	600,000 accomplished	Mostly loan driven, no records on basic plantation information
44,000 ha of mangrove plantations	around 15,000 ha developed under FSP	12,000 developed under CBFM-JBIC
40,000 ha of pine plantations	1,700 accomplished	under CBFM-JBIC
95,000 ha of rattan plantation	11,959 ha established	under FSP I & II
80,000 ha improved range mgt	none so far recorded	No unit at regional level to handle this.
Favorable climate and policy environment for wood based industries	The industry still clamors for policy reforms, e.g., conversion of expiring/former TLAs to IFMA, full deregulation of planted trees, delineation of production and protection forest, rationalization of the industry, etc.	There is already full deregulation of planted trees in private lands in Mindanao. Rationalization studies has been started, etc.
A rationalized wood based industry	No concrete accomplishments yet	Still under study by FMB, no policy yet
Establishment of Timber Industry Board	Timber Industry Board not yet established	There are proposals to pursue this, e.g. TREES, Inc., 2003.
40 sawmills retroed	No records	
10 plywood mills retroed	No records	
50 community sawmills	around 15 PCs with approved sawmills ?	No records at FMB
III. Institutional Development Programs		
Enactment of SFMA before 1992	Not yet enacted	

- no enabling policy to adopt the 1990 MPFD, the 1990 National MPFD and 1992 Regional MPFD are not being consulted in the conduct of regional planning and budgeting, non-implementation of DAO No. 23, Series of 1992 which is supposed to institutionalize implementation of 1990 MPFD through the National Forestry Planning Group (NPF) with Regional and field level counterparts
- confusions in land tenure and disorder in landuse;
- deficiencies of human resource development;
- lack of intersectoral co-ordination in addressing crosscutting issues.
- Program implementation problems
 - inadequacies of planning and programming system;
 - funding uncertainties, lack of funds to implement various sectoral programs including MPFD components
 - deficiencies in implementing people-oriented (participatory) forestry programmes;
- R&D, Forest Utilization and Technology problems
 - unscientific management of natural forest resource;
 - undefined areas of protection and production forests
 - wasteful forest utilization and inadequate value addition;
 - neglect of non-wood forest products (NWFPs);
 - weaknesses of R&D and forest extension;
 - serious lapses in plantation development (starting from site selection, seed procurement, nursery management, plantation establishment and management, harvesting, and even lapses in the purpose by which a forest plantation is established);
- Weak IEC and Training
- lack of a credible system of M&E, current systems not fully utilized by decision makers;
- Cross cutting issues
 - CBFM, as a cross-cutting strategy to rehabilitate and manage all forest lands and resources, has many things to patch up and build up from;
 - lack of boundary delineation on the ground;
 - deficiencies in conservation, protection and watershed rehabilitation;
 - lack of a system of natural resources accounting;
 - lack of system for C&I and forest certification.

Underlying all the problems/constraints/issues listed above, is the absence of real awareness and commitment on the part of decision makers. Awareness creation is a matter of good information and communication, along with public education on the economic and ecological significance forestry.

1.3.4 Potentials of the Sector

In spite of all the constraints being faced, forestry in Philippines has considerable potential for contributing to the development of the country – economically and ecologically. There is potential for:

- putting all forest areas under appropriate forest management systems that seek to obtain optimum economic and environmental benefits for forest communities, other stakeholders, and the society in general;
- expanding the area under forest cover through plantation establishment, enrichment planting and assisted natural regeneration;
- improving the quality of current natural forest stands through timber stand improvement and protection from man-made destructions, and pests and diseases;
- enhancing access to residual forests (through legally-allowed modalities) within production forest areas to improve wood supply position and manage the same in sustainable manner;
- tapping available private lands for forest plantations as demonstrated in CARAGA Region;

- enhancing forest productivity through multiple-use management and improved technology, minimal or waste-free harvesting/high utilization recovery and increased forest production without risking environmental/ecological values
- revitalizing the forest-based industries through rationalization and appropriate incentives, improved primary and down-stream processing, new product development
- developing of non-wood forest products (e.g., herbal products, agroforestry ventures);
- appropriate and rational management of protected areas and buffer zones;
- benefiting from forest biodiversity protection and management;
- promoting of forest-based recreation and eco-tourism;
- increasing overall direct benefits from the forest through proper planning for forest management and conservation.

1.3.5 Strengths of the Sector

The country also has several significant strengths which are important and relevant in supporting sustained development of forestry sector. These are significant factors which will contribute to the growth of the forestry sector, if adequately backed by appropriate policies and institutional mechanisms. Among these are:

- A tradition and history of forest management which dates back from Spanish Regime;
- Existence of executive imprimatur and operational models for productive DENR-LGU-Other stakeholders participation (DENR-LGU Joint MC, 2003-01)
- Existence of a reasonable extent of natural forests available to support bio-diversity and environmental objectives as well as production of goods and services. Along with private land forestry and agro-forestry, these would form a forestry base of adequate size;
- Existence of sectoral institutions and a large number of well trained and committed professionals and technical personnel with experience, whose performance can considerably improve through retraining and refresher training, and under congenial conditions;
- Philippines has an array of laws, rules and regulations, which can be modified /amended to suit the chosen developmental path for forestry;
- Existence of institutions for research and education which can be strengthened suitably;
- Existence of supporting institutions outside the forestry sector, such as the universities and centres of science and technology, fruitful collaboration can be developed with them;
- Availability of a fair amount of science and technology related to forestry most of which could be made beneficially operative;
- General acceptability of private sector and community participation in forestry activities, opening new avenues for development;
- Acceptability of agro-forestry and integrated farming as viable land use alternatives; and tree consciousness on the part of millions of farmers and homestead owners who are innovative and who have made homestead forestry an important component of the forestry sector, are special strengths;
- Existence of experienced NGOs involved in supporting grass-roots organizations and people's participation through group formation, provision of training, and promoting afforestation and environmental conservation;
- Availability of traditional knowledge on the uses of NWFPs, as well as artisanal/handicraft skills, which are yet to be adequately explored and utilized; this is also an area where rural women can increasingly participate;
- Existence of hard working labor force as valuable resource for providing reasonably-priced labor. This is a strength, in the short and medium-term which can enable Philippines to compete in international markets for processed products e.g. furniture, rattan and bamboo products, consumer articles based on NWFPs and handicrafts;
- Also, the constant efforts in facing the problems/constraints/issues (irrespective of their nature and impacts) have helped to provide certain useful experiences to the sector.