

Long Term Plan Forestry and Action Plan Forestry in Flanders

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Abstract

In Flanders, the first serious regulations to set up a "National Forest Program" (NFP) were taken by the Forest Act in 1990. Consequently, a comprehensive scientific study and analysis of the forest and forest policy were carried out. A first Action Plan Forestry was drawn up in 1994, but it never got a legal character.

The Flemish Environmental Policy Plan of 1977 insisted to set up an Action Plan Forestry. In 1998 the Flemish Forest Service launched two documents: the "Long Term Plan Forestry" and the "Action Plan Forestry". Together they were considered as the Flemish National Forest Program, in accordance with the recommendations of the International Panel on Forestry. However, although approved by several advice committees, these documents have never been legally approved.

The Long Term Plan Forestry is based on four touchstones: sustainability, multiple use, international developments and commitments, and social support. In this frame four key notions are distinguished: forest maintenance quantitatively, forest maintenance qualitatively, forest extension, and integrated task fulfillment. To concretize this plan an Action Plan Forestry with 29 actions and 19 regulating initiatives was launched.

The objectives of both action plans were only partly implemented. The too ambitious program was probably the most important reason.

The great challenge in Flanders is to legally approve an NFP. It is clear that such a program can only be approved when its ambitions are not too high, so that the interest of other sectors are not directly threatened. The value of such a minimal NFP is, however, very limited. Therefore it is probably better to draw up regularly an ambitious, actualized and well founded forestry document, which is not legally approved, but with a high moral value.

1. Introduction

Forestry as a science and a practical discipline is confronted with problems requiring a long term strategy. With regard to concrete planning in forestry three time levels are often distinguished: more than 100 years (general objective and vision), 20 years (management plan), 5 years (execution of action plans) (Anon.,2000).

The drawing up, approval and execution of such plans is, however, not evident. It requires the necessary knowledge, social support, political decision making and financial means.

In Flanders the first serious regulations were taken by the Forest Act of 1990. Art. 6 determines:

- A long term plan forestry must be drawn up by the Forest Service. At the same time implementation plans must be set up.

- The long term plan forestry and the implementation plans must be advised by the Flemish Supreme Forest Council, The Flemish Supreme Council for Nature Conservation and the Flemish Supreme Hunting Council.
- The long term plan forestry must be approved by the Flemish government and announced to the Flemish Parliament. (No provisions are stipulated concerning the approval of implementation plans).
Implementation plans must correspond to the spatial planning and the spatial policy.
- The implementation of the Act on Land Use must be directed to the Long Term Plan Forestry and its implementation plans. (This provision, however, was cancelled with the revision of the Forest Act in 1999.)

Consequently, by order of the Forest Service, a comprehensive scientific study and analysis of the forest and forest policy situation in Flanders were carried out (Anon., 1993). Thereafter an Action Plan Forestry was drawn up in 1994, which was considered as an implementation plan of the long term plan forestry (Anon., 1994). Yet, the so-called long term plan forestry itself did not exist. The Action Plan Forestry 1994 has been approved by different advice committees, but never got a legal character.

The Flemish Environmental Policy Plan (MINA-plan 2) of 1997 states as action 114 that an action plan forestry must be drawn up (and implemented) (Heirman, 1997). However, it does not say anything about the Long Term Plan Forestry itself. Yet, it determines a number of topics with respect to the content:

- The action plan contains a program, a financing plan and the needed instruments for the realization of the forest policy in the next five years.
- Important objectives and parts are:
 - delineation of 10,000 ha as forest extension zone, on top of the existing forest area, in which an ecologically justified forest extension will take place;
 - the striving at the realization, next to the above objective, of an additional forest extension of 10,000 ha in areas of the agrarian zone, in the frame of the EU-regulation 2080/92.
 - the realization of 3.000 ha forest reserves until 2002;
 - the link between close to nature forestry and the awareness for a viable profitability;
 - protection forests as a link to themes as desiccation, acidification, over-fertilization, disturbance by noise nuisance and fragmentation;
 - a more efficient regulation and management of forests, a.o. by forest groups.

In 1998 the Forest Service drew up two documents: the "Long Term Plan Forestry" (Anon. 1998a) and the "Action Plan Forestry" (Anon. 1998b). It is stated in an introductory text, that by doing so the Flemish authority implements its international engagements, namely the drawing up of "National Forest Plans", according to the provisions of the UNCED conference of 1992 (UNCED, 1992) and of the Intergovernmental Panel on Forestry (IPF) in 1997 (UN-CSD-IPF, 1996; UN-CSD-IPF, 1997). The policy plan formulates the objectives for the forest policy for a

plan horizon of 20 years, which the Flemish government engages itself for. This Long Term Plan Forestry must be implemented by successive action plans. The plan horizon is each time 5 years.

Although both documents have been approved by several advice committees, they have never been legally approved.

2. The Action Plan Forestry 1994

The Action Plan Forestry 1994 is a document of 56 pages, divided over 6 chapters. The first three chapters deal with the threefold objective of the forest policy: (1) forest maintenance and forest extension, (2) forest protection and sustainable forestry, (3) optimization and appraisal of the forest functions. The next three chapters mainly deal with the different actors: (4) relationship between forestry and other sectors, (5) the scientific research, (6) organization of the forest administration.

For each of these subjects both regulating initiatives (R) and action points (A) are mentioned. Both are described in a filing card. The regulating initiatives mention, next to the subject, also the objective, the way of implementation, the responsible persons or institutes, and eventually also the state of the matter. The action points mention the objective, the means, the responsible person and eventually the state of the matter.

2.1. Forest maintenance and forest extension

In this respect the following six themes are emphasized:

1. striving at an unconditional forest maintenance;
2. formulation of new exacting measures, but mainly of some stimulating measures; profitability of forests must be increased;
3. forest extension; forest area should increase around large cities, in buffer zones around industrial areas, in and around water-collection areas, by extension of existing forests and by the establishment of forest connecting areas;
4. authorities should give the example; some 700 ha of rest areas should be afforested;
5. pursuing of a purchase policy and elaboration of management agreements; purchase policy should be oriented towards the establishment of urban forests, the connection between and the extension of existing forests, and the establishment of protection forests;
6. afforestation of agricultural lands; the Flemish region aims at the afforestation of 10,000 ha of agricultural lands until 1999.

2.2. Forest protection and sustainable forestry

Attention is paid to the quality of the forest and to the quality of its environment:

1. the decreased forest vitality; the number of damaged trees increases with the annual monitoring; acidification of the forest ecosystem is a very important factor;

2. the fragmentation of the forest area; there are many small forest owners; almost 70% of the forest areas are smaller than 10 ha;
3. additional external factors, such as too high recreation pressure, weekend-houses and cottages, changes in water economy, high game pressure, etc.;
4. forestry measures such as forest survey and forest friendly fiscal measures;
5. combating greenhouse effect and climate change

2.3. Optimization and weighing of forest functions

The forest should be brought in such a situation that different functions can be fulfilled for the society.

1. the social function; accessibility of the forest should be stimulated and better regulated; education of the public should be further improved; a specialized forestry education must be given to the forestry personnel and the forest owners;
2. stressing of ecological functions; priority should be given to nature development in forests on poor sandy soils and to guidelines in favor of flora and fauna management; 800 ha of protection forest should be realized and 2,000 ha of forest reserves should be designated;
3. strengthening of the economic function; developing of forest friendly fiscal measures, supporting of mixed forest groups and incentives for a close to nature forestry;
4. weighing of functions; this should happen in the forest management plans;

2.4. Relationship between forestry and other sectors

One should look for more collaboration with other sectors and policy domains. A pre-requirement, however, is that the forestry sector itself is recognized.

1. relationship with the green area sector; the forestry must collaborate with the offices of public green areas;
2. relationship with the nature conservation sector; the aspect nature conservation should be more emphasized in forest policy and management; this is possible e.g. with the establishment of new forests, with the management of existing forests and with the designation of forest reserves;
3. relationship with the agricultural sector; for the establishment of forests in agrarian zones one should strive to a consensus with the agricultural sector;
4. relationship with other sectors and policy domains; special mention is made of water collection areas, industrial areas, highways, residential areas, the timber column, landscape aspects and international collaboration.

2.5. Scientific research

The Institute for Forestry and Game Management is considered as the most appropriated institute for the execution and/or the coordination of the research. Besides there should be well structured collaboration with universities and with the Institute of Nature Conservation.

Concerning the research program of the Institute for Forestry and Game Management, special attention is asked for forest ecology, site research, forest protection and breeding of forest trees.

2.6. Organization of the Forest Service

An appropriated organization of the Forest Service is a necessary condition for a successful Action Plan Forestry

1. Origin and justification of the existence of the Forest Service; the Forest Service has a long tradition and the Forest Act determines the establishment of the Forest Service.
2. Survey of legal tasks of the Forest Service; the main task is the application of the Forest Act.
3. The structure of the Forest Service should be adapted; due to the extension of the tasks a greater specialization is needed.

3. Discussion of the Action Plan Forestry 1994

An overview of the regulating initiatives and of the action points is given in annex1.

13 regulating initiatives and 20 action points were proposed, to be realized in a 5 years period. The number of initiatives per theme was very different. Moreover, some subjects are related to several themes (Table 1).

Two themes are clearly prevailing: 1) forest maintenance and forest extension, 2) forest functions. The total number of initiatives might be impressive, but an evaluation supposes anyway some putting into perspective. Indeed, not all initiatives can be considered as "original". On the contrary, most of the subjects belong to the daily assignment of the Forest Service. Other topics were at least already under discussion, if not already partially in preparation or execution. Therefore it is difficult to say exactly which initiatives can be considered as original. Anyway the number of really remarkable proposals was very limited, bv.: - a moratorium on deforestation;

- forest extension a.o. via rest zones;
- establishment of urban forests.

Table 1. *Number of regulating initiatives and action points per theme*

Theme	Number of regulating initiatives	Number of action points
Forest maintenance and forest extension	8	9
Forest protection and sustainable forestry	1	3
Forest functions	7	11
Forestry and other sectors		4
Scientific research	1	1
Organization of the Forest Service	1	

Most of the proposals are just to consider as necessary measurements in order to implement the existing policy or to meet urgent needs, which actually should have been fulfilled already for a long time. Examples are the designation of protection forests, regulation of the social function, organization of the Forest Service, recognition of production material, management plans of state forests, forest inventory.

Although the Action Plan has never been legally approved, forest policy was based on this plan. However, it is also not possible to determine exactly which actions were successfully executed and which were not. As a matter of fact many actions have been at least partially realized. On the contrary nothing or almost nothing has been realized of many other actions. The most successful actions were:

- moratorium on deforestation (issued in 1997, but already abolished in 1999);
- preparatory study of projects concerning urban forests;
- starting of forest inventory project (finished in 2000);

However, a great number of actions were not at all realized, a.o.

- adaptation of granting system for private forest owners;
- forest friendly fiscal measures;
- guideline for public forest owners;
- organization of Forest Service;
- afforestation of 10,000 ha of agricultural lands;
- conclusion of management arrangements with public owners;
- drawing up of management plans of state forests;
- drawing up of a data bank for afforested ownerships;
- designation of protection forests;
- accessibility of private forests;
- relationship between the agricultural sector and the forestry sector;
- international collaboration with regard to sustainable forestry.

In all, the success of the Action Plan 1994 was very limited. The success appears also from the amount of the proposed financial means and the cost price of the realized projects. The foreseen financial means for the implementation of the action plans were limited, with the exception of the foreseen means for forestry extension. However, almost nothing of this has been realized. The foreseen means for forest purchase were not greater than before. Some efforts have been done for an extra financial support of actions such as forest groupings, forest education, conversion of coniferous forests, establishment of urban forests and forest survey.

Despite the limited remarkable results, the Action Plan Forestry strongly supported the forestry sector. The forestry thinking was partially rejuvenated and stimulated and the position of the forestry sector was to some extent strengthened in relation to the other sectors.

4. Long Term Forestry Plan 1998

Based on the knowledge and the results of the Action Plan Forestry 1994, a second attempt to draw up a comprehensive forest policy plan was made in 1998, when the forestry circumstances

were apparentl more favorable. Two documents were the result: the Long Term Plan Forestr and the Action Plan Forestr (see 5).

The Long Term Plan Forestr is a theoretical document of 75 pages. It comprises four parts: 1) introduction (6 p), 2) situation (25 p), 3) Long Term Plan Forestr (46 p); 4) evaluation and adjustment (1 p).

The introduction stresses that forest polic in Flanders should not onl aim at wood production, but that forestr has a clear social task. Therefore forest polic must be an "integrated forest polic ", with a holistic vision and with knowledge of the ecological, economic and social relations.

4.1 Situation of the Long Term Plan Forestry

The Long term Plan Forestr is clearl situated, as well in the international context as in the Flemish frame. Firstl , it refers to the UNCED conference, specificall to the Forest Declaration, Agenda 21, the Convention on biodiversit and the climate convention. It also states, that other international agreements, such as the Convention of Bern, the Convention of Washington (CITES) and the International Agreement on Tropical Timber (ITTO) are related to the forest management. On Pan-European level, it refers to the resolutions of the Ministerial conferences of Strasbourg and Helsinki. On European level, it stresses the links with the Action Program for Forestr of the European Union of 1989, with special attention to the protection of forests against air pollution, the consolidation of forests in the frame of rural development and the regulation 2080/92 concerning forestr measures in agriculture.

With this Long Term Plan Forestr and the Action Plan Forestr the Flemish government wants to fulfil its international engagements and to follow the developments as posed b the Intergovernmental Panel on Forestr (IPF) concerning National Forest Plans.

The Long term Plan Forestr is based on the Strategic Plan Flanders. To this, first intention declarations are drawn up (mission or reason for existence and vision). Furthermore critical success factors (CSF), polic indicators and priorit subjects are determined. The Long term Plan Forestr fits both for the content and for the methodological point of view into the Strategic Plan Environment. Therefore it is referred to the Act on general stipulations concerning Environment Polic of 1995. Bases of this act are a.o. the prevention polic , the precaution principle, the priorit for source oriented measures, the stand-still principle and the principle that "the polluter pa s". The Long Term Plan Forestr is also based on the spatial planning , especiall on the provisions of the Spatial Structure Plan Flanders, in which two points are ver important for the forestr sector:

- the delineation of the forest within the natural structure; this includes provisions concerning the position and the objectives of the forest in the frame of the whole spatial order;
- an intention declaration on significant forest extension, partiall on an ecological basis and partiall on an economical basis, in the frame of the rural development.

A greater sense of responsibility of the forest owners, the creation of a financial basis for sustainable management, and a region oriented and spatially justified distribution of forests are concrete objectives.

The mentioned bases, strategies and objectives form the starting point for the task description, touchstones, key notions and objectives of the Long Term Plan Forestry.

4.2. Content of Long Term Plan Forestry

The part on the Long Term Plan Forestry contains 4 chapters: 1) task description (10 p), 2) real Long Term Plan Forestry (20 p), 3) organization of the Forest Service (5 p) and 4) scientific research and the Institute of Forestry and Game Management (11 p).

4.2.1. General tasks

Prior to the real planning process, a general task description for the forest in Flanders was formulated. It was derived from the situation of forest policy over the comprehensive Flemish and international environmental and nature policy.

The Flemish Long Term Plan Forestry respects the principles of Agenda 21 and the Forest Declaration. It should aim at a sustainable forest management and pay attention to the principle of multiple use forestry, the overall value assessment of forests and the achievement of the needed capacity.

The task description of the forest stand in Flanders stresses the following two points:

- the quantity of the forest stand; a significant forest extension is needed in Flanders;
- the quality of the forest stand; the forest sector should aim at a close to nature management of forests, which is maximally oriented to natural and ecological processes.

Special attention is paid to the "integrated tasks" concerning the forest functions in Flanders. Multiple forest use is the central starting point of the Forest Act and should be further developed. This includes the following forest functions:

- nature conservation function;
- socio-economic function;
- socio-educational function;
- scientific function;
- environment function; landscape and cultural-historic function.

The Flemish forest policy wants at the same time to develop as well as possible nature values, to aim at a profitable and efficient forest use, at more employment and a better coordination between forestry and the wood sector, to develop optimally the social and educational function of the forest, to strengthen the scientific knowledge, to implement optimally the forest protection function and to contribute to landscape preservation and restoration.

4.2.2. The real Long Term Plan Forestry

The strategic planning methodology of the Long Tem Plan Forestry uses a horizontal and a vertical structure.

The horizontal structure exists of 4 touchstones, which form the red thread through the whole policy:

- sustainability;
- multiple use;
- international developments and commitments;
- social support.

In order to get results and to guarantee permanent results, the extension of the social support is the last touchstone. Information and sensibilization of the common man are basic points of the pursued policy.

The key actions are proposed within the vertical structure. They are on one side the principles on which the long term policy is based and on the other hand the objectives for a longer planning period. They are formulated as follows:

- forest maintenance quantitatively;
- forest maintenance qualitatively;
- forest extension;
- integrated social task fulfillment.

Objectives are formulated, the wanted strategy is designed and finally a number of action points are elaborated for each of the key notions. Strategies and action points are given in annex 2. Objectives follow from a detailed description of the importance and from the analysis of the present situation of the key notion. They are mentioned below according to the key notions.

1. Key notion "forest maintenance quantitatively"

Objectives:

1. To preserve existing forests and to protect them against destruction.
2. To make forest ownership attractive.

Problems deal with the legal protection of the forest against deforestation. In order to assure forest protection, the social support should be extended.

2. Key notion "forest maintenance qualitatively"

Objectives:

1. The Flemish forest policy aims at a sustainable and qualitatively valuable forest management.
2. The Flemish forest policy aims at the restoration and maintenance of stable ecosystems and at development of nature values in forests.

3. The forest policy wants an active policy against fragmentation and a restoration of existing fragmentation.

Due to the present high pressure on environmental quality, a decreasing forest vitality is observed. Fragmentation is very high, the spatial forest distribution in Flanders is unequal, homogeneous stands and exotic tree species are prevailing. Policy is based on the Forest Act of 1990, deals with the drawing up of a management vision, especially for the public forest, respects the principles of close to nature forestry and has engaged itself for the certification of the forests. The achievement of forest quality is, however, not possible without a comprehensive environment policy.

3. Key notion "forest extension"

Objectives:

1. Implementation and strengthening of the forest structure
2. Support of forest extension by local authorities and private owners.

Attempts to extend the forest area are little successful. Forest extension is not considered by the society as a priority. Therefore demands for land use from other sectors normally get more priority. Moreover profitability of forests is very poor, financial support for forest extension is insufficient and a climate of legal insecurity exists. Forest policy wants to make the grant systems for the stimulation of forest extension more attractive. It hopes that many agricultural lands will be afforested with the support of the EU regulation 2080/92. It also recognizes the necessity to encourage forest extension in order to optimize the environmental and protection function of the forest.

4. Key notion "integrated social task fulfillment"

Objectives:

1. To responsabilize and to achieve a greater involvement of the target groups into the pursued forest management and policy.
2. To maximize the contribution of the forests to the quality of the environment.
3. To participate actively in international processes for the encouragement of the maintenance, the management and the sustainable development of all forests of the world.

Apparently, a recognizable and on all levels accepted forest policy is lacking. Forest policy has to be formulated clearly. It should be extended by an effective communication. An integrated forest policy supposes an intensive collaboration with other sectors and actors, a.o. with local management levels.

4.2.3. Internal organization of the Forest Service

First a mission and vision is formulated. In this the objectives, competences and focuses of the Flemish Forest Service are described. The Forest Service was in former times organized on the

base of decentralization, responsabilization and a certain financial autonomy of the managers. A problem, however, is that the provisions of the Forestry Act concerning the working of the Forest Service do not correspond to the personnel policy of the Flemish government. It is an absolute necessity, that there is a univocal vision on the global task packet of the Forest Service, in order to formulate an appropriate personnel occupation on all levels.

The following objectives are proposed with respect to the internal organization of the Forest Service.

- The elaboration of instruments to get a flexible organizational structure, suitable to adapt to the fast changing needs.
- The aiming at a uniform and internally supported forest management and policy.

4.2.4. Scientific research and the Institute of Forestry and Game Management

The Flemish government mainly concentrates the forestry scientific research around the Institute of Forestry and Game Management. This regional institute was founded in 1991, as a branch of the former federal research institute. The Long Term Plan Forestry states, that the institute mainly should focus on applied long term research, whereas universities should execute on one side the more fundamental research and on the other side applied short term research.

The present implementation of the research at the institute is described as follows:

- forest development, forest ecology and nature development in forests;
- forest tending;
- site research;
- forest maintenance, forest protection, influence of air, water and soil pollution;
- selection and breeding.

Moreover the institute supports research activities by third parties. The research task "wood quality and wood technology" is subcontracted to a university group, the same as the biotechnology for the breeding support and some aspects concerning air pollution impact.

Attention should be paid to the communication policy of the Institute in order to extend the research results to the different target groups.

Since the Forest Service is an important partner in the orientation of the research, regular consultation between the Forest Service and the institute should take place.

Concerning the relationship institute-universities it is stated, that one should aim in the future at a structured collaboration with the university laboratories and more specifically:

- aim at a maximal complementarity, efficiency and multidisciplinary of the research programs;
- involve the institute in the working of the university laboratories, a.o. for the guidance of thesis students and doctoral students and for providing guest colleges;
- the elaboration of a forestry library network.

The Long Term Plan Forestry pays also some attention to the recently founded "Educational Forestry Center Groenendael". This center fulfills an important task on the field of education and permanent training of officials.

4.3. Assessment and adjustment

The Long Term Forestry Plan formulates the forest policy for the next 20 years, but with a vision on a longer term. However, a regular assessment and adjustment is needed, a.o. for the following reasons:

- social evolutions are unpredictable;
- the dynamics of the forest policy;
- the dynamics on the international level of nature and environment policy;
- developments concerning social support and international collaboration;
- long term objectives must still be quantified.

It is the aim to assess the Long Term Plan Forestry and to adjust it with a 5 years cycle. The Action Plan Forestry (see further) must be evaluated and adapted yearly.

5. The Action Plan Forestry 1998

This Action Plan Forestry was launched together with the Long Term Plan Forestry and is to be considered as the implementation of art. 6 of the Forest Act of 1990 and at the same time as national forestry plan, as defined by the IPF. It has been drawn up for a period of 5 years.

5.1. Actions and regulating initiatives

The Action Plan Forestry is an implementation plan in the frame of the Long Term Plan Forestry. It concretizes the key actions and objectives to performable actions or initiatives. This way the Long Term Plan Forestry is step by step implemented.

From the strategic planning methodology of the Long Term Plan Forestry, one or more strategies are formulated for each key action and objective. Then, per strategy, one or more Actions (A) or Regulating initiatives (R) are mentioned (see annex 2).

The information about each action and each initiative is described by means of a filing card. These cards are composed of different information beams. The following beams successively occur:

- situation of the action or regulating initiative within the vertical structure (key notion, objective, strategy);
- short description of the actions or regulating initiative;
- stakeholders: a non restrictive list of the sectors or target groups involved with the implementation of the action or regulating initiative;
- initiator: responsible person or institute for starting the action or the initiative;
- state of the matter: list of former and current initiatives or regulations;

- means: credits needed for the implementation; a difference is made between the available and the additional means;
- relationships: with other actions or regulations.

In all 29 actions and 19 regulating initiatives are proposed, distributed as follows over the different key notions or actors:

Key notion or actor	Number of actions	Number of regulating initiatives
Forest maintenance quantitatively	5	6
Forest maintenance qualitatively	13	3
Forest extension	3	3
Integrated social task fulfillment	4	4
Internal organization	1	1
Scientific research and the Institute	2	1
Educational Forestry Center Groenendael	1	1

Actually it is remarkable that so many regulating initiatives are still needed. Most initiatives are related to the maintenance of the forest area. However, in the narrow sense of the word, only two regulating initiatives are directed towards the strict maintenance of forests, the other four are actually financial supports.

The greatest number of actions is foreseen for the forest quality. They are mainly directed towards the encouragement of a sustainable forest management and towards the restoration or the maintenance of stable forest ecosystems.

The greatest part of the actions and the regulating initiatives is directed towards the four vertical key notions. The main actor, which must implement these actions and regulations, namely the Forest Service, is hardly paid some attention.

5.2. Financial implications

The Action Plan Forestry 1998 contains some annexes with financial specifications. Table 2 presents an overview of the costs foreseen for the implementation of the plan.

The overall costs over 5 year are 1,021.3 million BEF (25.3 million EURO), corresponding to some 1,700 BEF/ha/j (42 EURO/ha/j). This is a relative high amount, in comparison to the annual management costs of public forests, which are estimated at some 3.500 BEF/ha (87 EURO/ha). So, the requested extra effort for the realization of the action plan is great. This appears also from the fact that the financing is only for almost 30% possible by already foreseen means. The remaining 70% have to be funded by extra means.

On the other side, it must be stated that an annual amount of some 5 million EURO is actually very little. Indeed, the Flemish government annually spends already for sole forest purchase about the double amount. So, if required or needed an internal shift in credits is possible.

Anyway, both the Long Term Plan Forestry and the Action Plan Forestry have never been approved by the Flemish government, as it were because the financial means were not

available. This reason was obviously a fallacy. The truth was probably, that no political will was present to approve the policy plan forestry, because some sectors did not agree with it.

Table 2. Foreseen cost of the Action Plan Forestry 1998, per key action and actor en per year (in millions of BEF)

Key notion and/or action	1998	1999	2000	2001	2002	Total cost
Forest maintenance quantitatively	6	25.6	41	44.4	52.8	168.8
Forest extension	83.5	190.5	111	58.5	25.5	469
Forest maintenance qualitatively	16.8	46.6	55.9	65.2	74.5	259
Integrated social task Fulfillment	12	5.5	38	10	10	75.5
Internal organization						
Scientific research		3	2	7	7	19
Education Forestry Center	2	4	6	8	10	30
Total cost per year	119.3	275.2	253.9	193.1	179.8	1,021.3
Financing						
Current means	31	82	66	59.5	56.5	295
Additional means	88.3	193.2	187.9	133.6	123.3	726.3

It is clear, that the greatest effort was planned for the key notion forest maintenance qualitatively. Then the items forest extension and forest maintenance quantitatively are coming. The little amount foreseen for the actors is remarkable. Yet, an annual increase is planned for education and training.

The five most important individual actions or regulating initiatives are:

1. A23: strengthening nature values in public forests (284 million BEF)
2. A30: realization of forest extension objective (139.5 million BEF)
3. R10: starting up of mixed forest groups between private and public owners (95 million BEF)
4. R31: elaboration of implementing order on acquisition grants and implementation of forest extension by public owners (80 million BEF)
5. R15: support of planning process and implementing of management vision (68 million BEF)

The strengthening of nature values in public forests should mainly occur by appropriate management measures, to be executed by workers. Forest extension is treated both in A30 as in R31, so together this topic becomes important. However, this is still a very little amount in absolute figures, which for sure will not allow to realize the wanted forest extension. The starting up of forest groups was a priority reason for the revision of the Forest Act in 1999. Both the Forest Service and (a number of) private forest owners are looking forward to the forest groups in order to improve the management of the fragmented forest area. To this, private forest owners expect a significant grant. However, it is striking, that the Action Plan only mentions the "starting up" of forest groups and not the annual working or subsidizing.

To note is also, that no special funds are necessary for 13 actions or regulating initiatives.

5.3. Actors involved into the Action Plan

With the description of each action or initiative, both the stakeholders and the initiators are indicated.

The initiative is mainly in the hands of the Forest Service. In most of the cases, however, the minister of environment is firstly mentioned, but between brackets it is directly referred to the Forest Service. Only in the two first regulations the minister of environment is exclusively cited. But this is probably to be considered as an editorial mistake. The minister of rural planning is, together with the minister of environment, mentioned for A3, the delineation of the forest structure.

It is especially remarkable that the number of involved parties is very high: in all 58 different stakeholders are cited by name. So, the number of actors in the forestry sector is apparently very great. Structured participation with all these groups is obviously impossible. Most cited stakeholders are:

- forest owners: twenty times;
- Institute for Forestry and Game Management: eleven times; besides other research institutions are still called eight times;
- nature associations: eleven times; from the "nature" group are also mentioned: sector nature three times, Institute of Nature Conservation four times and Nature departement two times;
- administration of rural order: eight times
- local and provincial governments are each seven times called;
- Educational Forestry Center Groenendael: seven times.

Stakeholders with the financial most important actions or regulations are:

- A23 (strengthening of nature values in public forests): forest owners, recognized nature associations, other user groups;
- A30 (implementation of forest extension objective): Flemish Land Agency, agricultural sector, nature sector, administration of rural order;
- R10 (starting up of mixed forest groups): forest owners, local and provincial authorities;
- R31 (acquisition grants for forest extension by public authorities): forest owners, public authorities, Society of cities and municipalities, provinces;
- R15 (implementation of management vision): Forest Service, public owners.

In the forestry sector are further also called: the wood column: three times, forest operators and forest unions: each two times, the society of forest-owners and the tree nurserymen: each one time. The Forest Service is three times both initiator and stakeholder.

The agricultural sector as such is called five times. Besides agricultural societies and different administrative agricultural services are also five times cited.

With some actions or regulations a great number of stakeholders are called. This is e.g. the case for:

- A27 (reevaluation and sanitation of existing forests): Flemish Land Agency, administration of rural order, agriculture, nature, administration of roads, administration of traffic, municipalities, provinces, forest owners, research institutes);
- R33 (regulation 2080/92): administration of agriculture and horticulture, EU, federal ministry of agriculture, farmers, municipalities, provinces, recognized nature associations, Society for Forests in Flanders, Institute of Forestry and Game Management, project poplars for farmers;
- A29 (urban forests): municipalities, provinces, administration of rural order, recognized nature associations, Society for Forests in Flanders, farmers, youth associations, tourist sector, socio-cultural organizations;
- R34 (responsibilization and greater involvement): local authorities, agricultural associations, nature associations, Pro Silva Flanders, Society for Forests in Flanders, recreational sector, forest owners, provinces;
- R41 (participation in international processes): federal authority, other regions, administration of foreign policy, administration of budgeting, Accounting and Financial Management, NGO's, federations of timber trade and wood industries.

6. Discussion of Long Term Plan Forestry and Action Plan Forestry 1998

The Flemish Long Term Plan Forestry and the Action Plan Forestry 1998 are, each of them, two very valuable documents, at least from the theoretical point of view. Although these documents never got a legal character, they have undoubtedly contributed (by their authoritative character) to the strengthening of the forest sector in Flanders.

The Long Term Plan Forestry is theoretically well structured and founded. It leads to 29 action points and 18 regulating initiatives, which are structured according to the pattern: key notion > objective > strategy > action. All actions are described in a filing card with the following info: situation, content, stakeholders, initiator, state of the matter, means and relationships. So a starting situation is created, which should in principle lead to good results.

Apart from the legal situation of these documents, it is clear that they have got, as well internally as externally, a great significance. The documents are the consequence of an intensive discussion within the Forest Service, are to some extent the balance of the pursued policy and form of course the basis for the future policy. The external sectors, which mostly do not have such documents available, were obliged to take into account the vision and the objectives of the forest policy.

It was also significant, that there was tried for the first time an attempt to make a listing of all stakeholders. To this 58 stakeholders were identified, with as main groups: the forest owners, the Institute for Forestry and game management, the nature associations, the administration of rural order, the municipalities and the provinces, the Educational Forestry Center Groenendael. Forest owners are obviously the most important stakeholders. The Institute for forest research and the Educational Center are supporting institutes. The great significance of the "nature" group is somewhat remarkable. This group is partially to be considered as a supporting group, but is

generally experienced as an important interest group. Also the impact of rural order on the forest is somewhat surprising, but is clearly the consequence of the strong "region oriented" approach of the policy (Anon., 1997; Anon. 1999).

From the theoretical point of view a number of points, which were rather negatively experienced, can also be mentioned.

1. The concept does not correspond, certainly not fully, to the prescriptions as formulated in the meanwhile well known "national forest programs". This is not surprising, since the term NFP was still very new in 1998 (FAO, 1996; Ball, 2000).
2. Its theoretical basis does not always correspond to the language use of a forester. The concept is based on general planning strategies, which use a number of relatively forest unfriendly terms. Such terminology is difficult to understand and is certainly not encouraging for the common forest user. A positive result requires that stakeholders understand the language.
3. The documents were drawn up without much participation. The great number of identified stakeholders are hardly involved in the process.

Finally, the weakest point of the documents is that they have never been legally approved. Even more they have never been discussed on the political level. The so-called reason for disapproval, namely the high financial costs, cannot be considered as correct.

It is difficult to present in absolute figures the concrete results of the Action Plan Forestry. The objectives are not always realized for 100% and their implementation is not necessarily the direct consequence of the Action Plan. Anyway, a number of positive points should be mentioned:

- the review of the Flemish Forest Act in 1999;
- the delineation of the forest structure in the frame of rural order;
- the starting up of forest groups;
- the certification of a number of pilot forests;
- the drawing up of the management vision by the Forest Service;
- the designation of a network of forest reserves;
- the strengthening of sustainable forest management and of nature values in forests;
- the strengthening of information and communication;
- special contacts with a limited number of local authorities with respect of forest extension.

Nevertheless, the number of action points, of which the result is very poor, is also remarkable:

- the moratorium on deforestation has been abolished;
- the fiscal pressure due to inheritance taxes is not decreased;
- forest ownership did not become more attractive;
- institutionalized participation has not been elaborated;
- the internal organization of the Forest Service has not been improved, on the contrary;
- the quality of the environment has not been significantly improved by the forest management;
- the annual assessment and adjustment was limited.

7. Comparison 1994-1998 and conclusions for future planning

It is remarkable that both documents, prepared by an executive service of the ministry, do not use the terminology of the Forest Act. Legally the terms "long term plans" and "implementing plans" are used, whereas these documents mainly launch the term "action plan" and besides that "Long Term Plan Forestry". There is also no agreement between the Flemish Environmental Plan of 1997 (MINA-plan) and the Forest Act of 1990. The MINA plan just speaks of action plans and does not use the legally foreseen terms. This leads at least to some confusion. The Action Plan Forestry of 1994 is well based on a recognizable forestry language, whereas the Long term Plan Forestry 1998 often uses a very difficult and forestry unfriendly language.

There is a clear difference between the concepts in 1994 and 1998. At the beginning only an Action Plan Forestry was drawn up, whereas in the second phase a Long Term Plan Forestry and an Action Plan Forestry were launched at the same time. It was positive in 1994 that the Action Plan Forestry was based on an extended scientific study. The structure in the first document of 1994 is less systematic and the actions and regulations are less concretely formulated. They are only mentioned in the annex. The presentation of the action plans in 1998 is further elaborated than in 1994. It was positive in 1998 that a financial part was linked to the Action Plan. However, this has not led to better results. The different chapters have another title in the two documents, but actually the content is mainly the same. In 1994 the titles of the chapters corresponded much better to the terminology of the Forest Act of 1990, whereas in 1998 the terminology was much less adapted to the typical forestry language (see above). Indeed, a term such as "integrated social task fulfillment" is much more difficult to understand than "optimization of forest functions".

The 1998 documents refer much more to international references and conventions. It is remarkable how many significant international documents have been published between 1993 (starting with UNCED) and 1998. The ideas of sustainable forestry were in 1998 much better developed. Also the term "National Forest Program" was at that time already better known, but certainly not yet popular. The aspect "nature" in forests has been much more developed in Flanders between 1994 and 1998 and the influence of nature policy on forestry also strongly increased. Generally speaking, the position of the forest in 1998 was much better than in 1994.

Since the term NFP was not yet well known when the documents of 1998 were prepared, they have not been drawn up according to the principles formulated by the NFP's (Egestad, 1999; Michaelsen, 2000). Although in 1998 the principle of "participatory approach" has not been applied during the preparation of the documents, a great number of stakeholders were identified. However, they were still considered as third parties. The agricultural sector, which is of the greatest importance for the item forest extension, was not involved.

The objectives of the action plans were in both cases only for a limited part implemented. The too ambitious program was probably the most important reason. Indeed, it is not possible to issue so many regulations and to implement so many actions in a four year period. The best

example of this was shown by the point forest extension. Although the objectives in 1994 were still very limited, they were not realized. Nevertheless much higher objectives were proposed in 1998, but they could only minimally be implemented, even under improved forestry circumstances. Up to forestry ownership was not made more attractive. Fiscal measures related to inheritance taxes could not be approved. On the contrary, private owners are more and more charged by all kind of limitations, whereas grants or financial compensations are negligible.

The Long Term Plan Forestry, as mentioned in the document itself, does not contain a number of primary and quantified objectives. The problems are well outlined and the recommended directions are indicated, yet concrete objectives are mostly not formulated. Adjustments were later not made. A future NFP will have to give a clear picture of a number of points, such as forest area, forest type, forest functions, management vision, position of private forest owners, criteria of sustainable management, relationships to other sectors, position of the forest administration, means, etc.

The great challenge in Flanders is, however, to legally approve an NFP. The two preceding attempts have failed, mainly as the result of resistance of other sectors. It is clear, that an NFP in Flanders can only be legally approved when the ambitions are not too high, so that the interests of other sectors, such as nature, agriculture, industry, house-building, etc. are not directly threatened. The value of such a minimal NFP is, however, very limited. Therefore it is probably better to draw up regularly an ambitious, actualized and well founded forestry document, which is however not legally approved, but with a high moral value.

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Annex 1. Regulating initiatives and action points of the Action Plan Forestry 1994

- R.1. The position of the forest in the structure plan Flanders
 - R.2. Moratorium on deforestation and regulation for compensating afforestation
 - R.3. Revision of Forest Act
 - R.4. Adaptation of regulation on subsidies for private-forest owners
 - R.5. Mixed forest groups
 - R.7. Development of forest friendly measures
 - R.8. Designation and recognition of protection forests
 - R.9. Purchase policy
 - R.10. Guideline on social function
 - R.11. Guideline for public forest owners
 - R.12. Operationalization of the Institute of Forestry and Game Management
 - R.13. Recognition of forestry production material
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- A.1. Implementation EU-regulation 2080/92
 - A.2. Forest extension - rest areas
 - A.3. Concluding management agreements with public owners
 - A.4. Encouragement of mixed forest groups
 - A.5. Drawing up of management plans of domanial forests
 - A.6. Drawing up of management plans of private forests
 - A.7. Drawing up of a databank for afforested lands
 - A.8. Forest purchase
 - A.9. Designation of protection forests and elaboration of management measures
 - A.10. Forest education and training - accessibility of forests
 - A.11. Forest education and training - Educational Forestry Center Groenendael
 - A.12. Campine forests
 - A.13. Reduction of the gap between ecological and economic function
 - A.14. Social function - urban forests
 - A.15. Designation or recognition of forest reserves
 - A.16. Relationship between the sectors agriculture and forestry
 - A.17. Organization and coordination of scientific research
 - A.18. International collaboration concerning sustainable forestry
 - A.19. Recognition of forestry production material
 - A.20. Forest survey

Annex 2: Actions and regulating initiatives of Action Plan Forestry 1998-2002**KEY NOTION 1: FOREST MAINTENANCE QUANTITATIVELY****OBJECTIVE 1: To preserve existing forests and to protect them against destruction**

- **Strategy 1: Control and maintenance**

R1: Implementing act on moratorium

R2: Enforcing of Forest Act via a strengthened control and maintenance; elaboration of administrative and prosecution means

- **Strategy 2: Integration in rural order**

A3: Proposition for delineation of the forest structure and realization of its adaptation in the rural structure planning

A4: Starting up of a forest land register

OBJECTIVE 2: To make forest ownership more attractive

- **Strategy 1: Adaptation of fiscal measures**

R5: Impact study concerning reduction of inheritance taxes

R6: Encouragement of an ecologically justified forest management by adaptation of fiscal charges to the forest enterprise

Strategy 2: Financial support of a sustainable forest management

R7: Further elaboration and refinement of a uniform financial support of public and private-forest owners

A8: Elaboration and starting up of a Green fund

Strategy 3: Structural measures within the forest sector

A9: Better organization of the forest labour market

R10: Starting up of forest groups between private and public owners

A11: Better wood marketing

KEY NOTION 2: FOREST MAINTENANCE QUALITATIVELY**OBJECTIVE 1: The Flemish forest policy aims at a sustainable and quantitatively valuable forest management****• Strategy 1: Target group policy in function of a good forest practice**

R12: Elaboration and implementation of a code for good forest practice and a recognition regulation for forest operators

• Strategy 2: Encouragement and realization of sustainable forest management

A13: Sensibilization campaign towards forest owners with regard to a justified forest management

A14: Further elaboration of pilot projects concerning forest certification

R15: Support for planning process and implementation of management vision

A16: Establishment of ecological filing cards of main tree species

A17: Concluding management agreements with public forest owners

• Strategy 3: Policy formative scientific research

A18: Research on vitality and diseases of main tree species

A19: Forest reserves as references for forest management

A20: Determination of acidity sensitiveness of forests

OBJECTIVE 2: The Flemish forest policy aims at a restoration and maintenance of stable ecosystems and the development of nature values

• **Strategy 1: Maintenance of autochthonous tree and shrub species**

A21: Initiatives against protection and maintenance of autochthonous gene sources of forest trees and shrubs

• **Strategy 2: Designation of forest reserves and nature oriented management acts**

A22: Network of forest reserves

A23: Strengthening of nature values in public forests

A24: Control of black cherry

Strategy 3: Financial social support for a close to nature forestry

R25: Elaboration and implementation of a contribution regulation for the support of nature development in forests

OBJECTIVE 3: Forest policy wants to pursue an active defragmentation policy in order to prevent further fragmentation and to reduce existing fragmentation

• **Strategy 1: Research and support of a defragmentation policy**

A26: Policy supporting research on the impact of fragmentation on forest biodiversity

• **Strategy 2: Region oriented approach of forest extension and defragmentation initiatives**

A27: Revaluation and sanitation of existing damaged forests

KEY NOTION 3: FOREST EXTENSION**OBJECTIVE 1: Implementation and strengthening of forest structure**

- **Strategy 1: Refinement of the forest structure to concrete implementation plans**

R28: Establishment of a sector covering decision making system for forest extension

A29: Delineation and implementation plans for urban forests

- **Strategy 2: Active forest extension policy by the government**

A30: Realization of the forest extension objective

OBJECTIVE 2: Support of forest extension by local authorities and private initiatives

- **Strategy 1: Financial support of forest extension by public authorities**

R31: Financial encouragement of forest extension by public authorities via subsidies for acquisition of lands (art. 13 Forest Act)

- **Strategy 2: Encouragement of afforestation of agricultural lands**

A32: Information campaign for owners and tenants of agricultural lands

R33: Assessment, adjustment and implementation of the contribution regulation in the frame of the Regulation 2080/92

KEY NOTION 4: INTEGRATED SOCIAL TASK FULFILLMENT**OBJECTIVE 1: To responsabilize and achieve a greater involvement of target groups to the pursued forest management and policy****• Strategy 1: Participation of target groups**

R34: Elaboration of a formalized participation on local level between different user groups of the forest and forest owners

A35: Use of information and communication technology for an integrated and participatory approach of the social task fulfillment

• Strategy 2: Support of associations

A36: Designation of forests with a special accessibility regulation for the benefit of youth recreation

R37: Elaboration and provision of a grant regulation for special policy supporting forest projects and initiatives

OBJECTIVE 2: To maximize the contribution of the forests to the quality of the environment**• Strategy 1: Policy preparatory research**

A38: Restoration measures for forests in the frame of desiccation policy

• Strategy 2: Financial social support for forests with an environmental protection function

A39: Elaboration and implementation of criteria for the recognition of protection and buffer forests

OBJECTIVE 3: To participate actively in international processes for the encouragement of the maintenance, the management and the sustainable development of all forests of the world

R40: Design of an international policy strategy

R41: Elaboration of financing scenario's for the international forest policy strategy

THEME 5: ORGANIZATION OF THE FOREST SERVICE

OBJECTIVE 1: To develop a customer oriented, functional and future oriented provision of service

- **Strategy 1: An adapted internal organization**

A42: Submission to the government of a report with proposals for consolidation of the internal organization of the Forest Service

Strategy 2: Acquirement and use of needed means

A43: Submission of a personnel need plan on the base of core tasks, norm costs and process plans

THEME 6: SCIENTIFIC RESEARCH AND THE INSTITUTE FOR FORESTRY AND GAME MANAGEMENT

OBJECTIVE 1: Organization of scientific research with maximal policy support

- **Strategy 1: Formalizing of collaboration connections**

R44: Collaboration protocol between the Institute for Forestry and Game Management and the Forest Service

- **Strategy 2: Better flow of research results**

A45: Information and Knowledge Center Flanders

A46: Operationalizing of forest databank

THEME 7: EDUCATIONAL FORESTRY CENTER GROENENDAEL (EBG)

OBJECTIVE 1: Provision and improvement of technical education offer and organization of permanent training on the basis of new scientific insights

R47: Definitive installation of Educational Forestry Center Groenendael by act.