

## Supplementary materials

### Evaluation of the performance of the Northwest Silvo-Pastoral Office

#### *Criterion 1: Orientation toward market demand*

I.1. Supporting market revenue for forest people: By implementing development projects, the Northwest Silvo-Pastoral Office supports the creation of micro-enterprises for people living in forests in order to improve their incomes (by beekeeping, breeding). The revenues from microenterprises are limited [54] and they can be considered as a contribution to poverty alleviation rather than as market orientation. The market revenue cannot be considered substantial for forest people.

I.2. Supporting marketing/professional competence: Since the Office does not sell any forest products and does not generate revenue, there is no marketing department focusing on the market and using marketing competencies or strategies. Marketing competence can be assessed as not professional.

Performance judgment: The market revenue is not substantial for forest people and there is a lack of marketing competence. The institution's performance is estimated as zero or "0". (Appendix 3, Table C)

#### *Criterion 2. Orientation toward non-market demand*

I.3. Plans for public/merit goods production/provision: Currently the main activities of the Northwest Silvo-Pastoral Office are to ensure the implementation and execution of the programs of development projects funded mostly by international donors and based on an integrated development in rural and forested areas which are highly inhabited (especially forest clearings). In these projects, the Office contributes to the elaboration of Community Development Plans. During the Fourth Project of Northwest Forest Development [55] the Office implemented all 113 plans for this project phase. These plans concern the rural population (forest people are considered as part of this population) and they are funded by international donors and the Tunisian government (with very low financial contribution). They consist of a set of different activities (physical activities and technical support) and they almost contain a section dedicated to forest activities (e.g. water and soil conservation, opening or maintaining tracks, etc.). To conclude, the Northwest Silvo-Pastoral Office provides plans with the main target of improving the livelihoods of rural forest people.

#### I.4 Financial inflow for public/merit goods production/provision

The Office implements projects which are mostly financed by international organizations. The Fourth Project of Northwest Forest Development (2011-2017) was entirely executed by the Office and financed in majority (72% of the total costs) by the World Bank [55]. Around 80% of this amount was dedicated to public goods, namely to the consolidation, protection and management of natural resources, as well as the improvement of the basic rural infrastructure (tracks, safe drinking water, irrigation, etc.). The Office's budget is not substantial and their activities of providing non-marketable goods are based on substantial financial inflow coming from international organizations.

I.5. Audits: Since the funding received by the institution comes from international organizations, it is common to find audits on the website of these funders. For instance, the World Bank's website there is a document called "Implementation status and results reports of the Fourth Project of Northwest Forest Development". This document includes a comprehensive assessment of the implementation and results of the project indicating a "moderately satisfactory" implementation progress.

Performance judgment: By combining the results of the three indicators, the performance of the institution can be considered as moderately strong or "2.5". Despite fulfilling all the indicators the performance was not rated as strong or "3" due to the limited area of intervention of the institution which relies on project funding and programs to provide public goods (Appendix 3, Table C).

*Criterion 3: Sustainability of forest stands*

I.6 Obligation to sustain forest stands: This obligation is included in the first article of the Forest Law [6] (see the evaluation for the General Directorate of Forests).

I.7 Existence of forest management plans: Legally, the elaboration of management plans for forests is the task of the General Directorate of Forests. However, the Office conducted a considerable number of Community Development Plans in the context of development projects and implemented 404 plans since its establishment (Interview 10). These plans contain sections dedicated to forest activities (water and soil conservation, plantations of forest species, maintenance and creation of forest tracks, etc.) which are of benefit to the forest people. Nevertheless, these plans are not considered by the General Directorate of Forests as official management plans and their implementation depends to a great extent on the available foreign funding.

I.8 Requirements for sustaining forest stands: This task is not in the scope of the activities of the Office. The record of these requirements about non-declining forest capacity is performed by the General Directorate of Forests (in inventories).

**Performance judgment:** Despite the existence of an obligation to sustain forest stands, forest management plans are not implemented and the requirements for sustaining forest stands are not fulfilled. The performance of the institution can be estimated as “1” or weak (Appendix 3, Table C).

*Criterion 4: Technical efficiency*

I.9 Managerial accounting: The Northwest Silvo-Pastoral Office’s main task is to execute and support the implementation of development projects. Managerial accounting exists within the administrative and financial department (Interview 8). The existence of such accounting has objectives related to the activities of the Office (orientations toward investment into development projects).

I.10 Support of new technology and high productivity: This indicator was developed to show to what extent the microenterprises supported by the Office (via the implementation of international projects) are oriented toward the use of new technologies and how important is the money invested in order to achieve high productivity. As an example, a study conducted by the French Agency for Development [56] shows that in beekeeping the minimum number of beehives should be about 50 hives in order to generate an annual income that is able to satisfy the needs of a young person. The total use charges of this unit of production are around 8,150 TND<sup>1</sup>. By referring to two development plans for the small regions of Ordha-khadouma (2015) and Kbouch (2006) [26,57], it can be seen that the investment is considerably lower than the minimum standard. These plans allocate 2,500 TND per micro-project, which is by far lower than the amount required for a basic unit of honey production. In the case of breeding development projects in these regions, implemented or supported by the Office, use relatively new technologies for genetic amelioration [54]. Almost all of the consulted community development plans produced in collaboration with this institution contain this kind of genetic amelioration aspects (e.g. the plans of Sidi Rabeh, Ladhieb, Mallela for the period 2012-2016 [58–60]). However, this genetic amelioration concerns limited and specific areas covered by these development plans. In conclusion, the Office supports micro-projects oriented toward poverty alleviation rather than high productivity.

**Performance judgment:** By combining the indicator’s results, the performance can be considered as weak or “1” (Appendix 3, Table C).

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<sup>1</sup> TND: Tunisian Dinar

*Criterion 5: Profits from forests for forest people*

I.11 Revenue for forest people: As mentioned previously, the institution supports microenterprises with a poverty alleviation objective. These microenterprises allow forest people to generate small additional revenue from forests to help them survive [54](Northwest Silvo-Pastoral Office, 2015).

I.12 Integration of people in performing activities defined by development plans/projects: The office performed many studies in the context of projects and community development plans. In the majority of cases people living in the concerned area were integrated in the execution of the activities (plantations, opening roads, etc.) which generate income for them.

**Performance judgment:** The performance of the institution for this criterion can be considered as moderate or “2” (Appendix 3, Table C).

*Criterion 6: Orientation toward new forest goods*

I.13 Professional market information: The Office activities are not oriented toward market demand because this institution has a socio-economic role in implementing development projects and applying the participatory approach to integrate local people in the process of development.

I.14 Investment into new forest goods: The office invests into development projects in order to improve the living conditions of rural and forest people. It has been investing in the same type of forest merit goods for several years.

I.15 New external partners: There is no intention by the Office to find new partners or produce new services (Interview 8). The office passively implements development projects without any strong position in the strategic decision-making planning.

**Performance judgment:** The judgment of the performance of the Office regarding this criterion can be evaluated as zero or “0” (Appendix 3, Table C).

*Criterion 7: Advocacy for forestry*

I.16 Trustful cooperation with actors from the wood-based sector: The Office cooperates with different sectors including the General Directorate of Forests (Interview 8). This means that this cooperation is not essentially based on the wood-based sector actors.

I.17 Aspiration to role of advocate: Since it was admitted that the institution does not intervene directly in forests and forestry (Interview 8) and that it deals only with socio-economic issues, the advocate's role for forestry cannot be aspired.

I.18 Acceptance of role of advocacy: In all interviews when discussing forests, the General Directorate of Forests was stated as the only institution that is considered by other actors to be the advocate for forestry.

**Performance judgment:** Regarding this criterion, the performance of this institution can be assessed as zero or “0” (Appendix 3, Table C).

*Criterion 8: Mediation of all interests in forests*

The institution acts within a limited area (the Northwest) and has no power or position in the forestry sector to become a mediator of different interests.

I.19 Trustful cooperation with actors from different sectors: The most important partners that the institution cooperates with are from different sectors, including associations, directorate of forests, financial institutions, etc. (Interview 8).

I.20 Integration of people in the decision-making process: The institution's policy is based on the participatory approach to integrate people who live in rural and forest area into the decision-making

process. This role is observed in the community development plans implemented by the institution which contain the results of meetings with local people to express their concerns.

Performance judgment: Despite acting within a limited area with limited power, the institution has a trustful cooperation with different actors and integrates people in the process of decision-making. Thus, the mediator role is not totally absent or weak and the performance of the institution can be assessed as nearly moderate or “1.5” (Appendix 3, Table C).