

## 0. Summary

The objective of this Project was to formulate the Plan d'aménagement Forestier (PAF)<sup>1</sup> in four Classified Forests (CFs), to improve the capacity of forest administrative agencies for supporting activities and the capacity of Groupement de Gestion Forestière (GGF)<sup>2</sup>/Union des Groupement de Gestion Forestière (UGGF)<sup>3</sup> for sustainable forest management. Moreover, by strengthening the cooperative relationship between forest administrative agencies and the GGF/UGGFs, this Project intends to have the GGF/UGGFs appropriately implement sustainable forest management activities. The implementation of this Project at both the ex-ante evaluation and ex-post evaluation was relevant to the development policy and needs of Burkina Faso, a country where serious decrease in forest areas and related problems have been confirmed and the appropriate implementation of forest management has been an object of focus. The Project also conformed to the measures taken under Japan's ODA policy toward Burkina Faso as of the ex-ante evaluation. The relevance of the Project is therefore rated as high. Regarding the effectiveness of the Project, zoning borders were clarified in the target CFs, and the GGF/UGGFs acquired forest management knowledge and techniques through the project implementation. In addition, the PAF was formulated and forest activities were commenced based on the PAF. Moreover, as a series of flows were developed for the sale of timber and non-timber forest products (hereinafter referred to as "forest products"), one of the main project purposes, namely, that expected “activities be implemented for forest management by the local people”, was achieved. The GGF/UGGFs have continuously implemented activities in accordance with the PAFs. Although members in three out of four GGFs have decreased, all of the members pay GGF membership fees and continuously implement forest management activities. The overall goal, which aims at practicing ongoing

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<sup>1</sup> Pursuant to the approval of the *Revised Forest Act* during the national legislature held on April 5, 2011, the *Plan d'aménagement et de gestion forestière* (PAG), the plan to be used at the start of the Project, was changed to the PAF. Since then, it has been called the PAF. The PAF is to be used in this report. According to the *Revised Forest Act*, the PAF is defined as a legal and technical document that describes the types of forests to be developed; the objectives in classifying the CFs; the types of forestry practices used in certain areas; the period and the methods used in implementing forestry practices; and the division of production and costs for forest management. The PAF is composed of two plans, the first is the forest development plan as a technical guideline, and the second is the forest management plan as a financial guideline. The forest development plan and the forest management plan are revised/formulated every 20 years and five years respectively. The forest management plan is scheduled to be newly revised/formulated in 2017.

<sup>2</sup> The GGFs are established for the improvement of life conditions and the appropriate utilization of forest products. Their main roles are wildfire prevention, afforestation, monitoring patrol in the CFs and development of seedlings. The budget for the implementation of the activities is funded from the income generated by forest management activities and is partly pooled to cover the running cost of the GGFs. The GGFs are officially registered after approval by the departmental offices (Source: Documents provided by JICA).

<sup>3</sup> A UGGF is a union of GGFs and acts as a window between the forest department/external agencies and GGFs. It also coordinates each activity of the GGFs about forest development and management. As with the GGFs, the UGGFs are officially registered after approval by the departmental office. A UGGF consists of GGF members but not necessarily representatives of the GGFs. The operational costs of a UGGF are collected as UGGF union dues by each GGF (Source: Documents provided by JICA).

forest management (or ongoing implementation of the activities) by the local people, was therefore achieved. Moreover, the living conditions of the local people were drastically improved and ongoing cooperation between companies/associations and GGF/UGGFs was confirmed. Another project effect, such as the implementation of activities for formulating the PAF in other areas, was confirmed, so the project impact is also rated as high. From the reasons mentioned above, the effectiveness and impact of the Project are rated as high. The project cost and project period both exceeded the plan, so the efficiency of the plan is rated as fair. Concerning the project sustainability, no problems were observed in institutional and technical aspects. The fund management capacity, however, has not been firmly established in the GGFs, and the GGF/UGGFs failed to secure necessary budgets for the implementation of forest management activities written in the PAF as planned. As such, problems with the financial aspects of the Project were confirmed. The performance of some of the forest management roles was also confirmed to be incomplete, as sufficient budgets for implementing the activities were not secured. Under these circumstances, the sustainability of the project expected effect is rated as fair.

In light of the above, this Project is evaluated as satisfactory.

## 1. Project Description

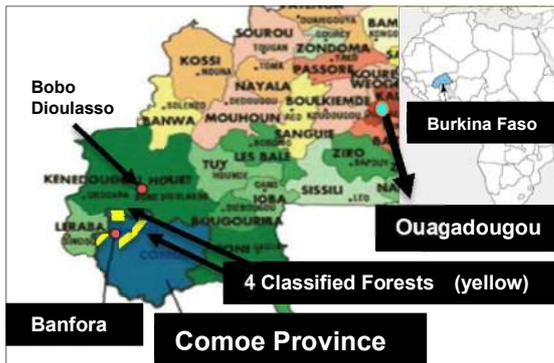


Figure 1 Project Locations



Figure 2 Bounouna Classified Forest

### 1.1 Background

The northern part of Burkina Faso, which belongs to the Sahel zone, faces a serious and spreading problem of desertification. The degradation and loss of forests is remarkable even in the southern part of the country, an area relatively rich in forest resources. As such, the need to preserve the precious forest resources is increasingly pressing throughout the country as a whole. Against this background, the Government of Burkina Faso responded to this crisis by drawing up a *National Forest Policy (NFP)* in 1995. The Ministry of Environment and Sustainable Development (Ministère de l'environnement et du développement durable) (MEDD)<sup>4</sup>, the body in charge of forest management, has implemented community-based sustainable forest management

<sup>4</sup> At the time of the project completion, MEDD was called Ministère de l'Environnement et du Cadre de Vie (MECV).

based on the *NFP*, but problems with the funding and structure of the implementation have impeded implementation. Funding and the spontaneous implementation of activities by local people have both been necessary to maintain sustainable forest management. The establishment of a system for reliably securing funds has therefore been awaited and desired.

Responding to a request by the Government of Burkina Faso, JICA therefore conducted the *Comoe Province Forest Management Plan Survey (August 2002 - June 2005)*, and it proposed a direction and approach for formulating a participatory forest management plan in five CFs<sup>5</sup> in Comoe Province. However, the staff of the forest administration agencies had no experience in the implementation of the forest management project and the necessary knowledge and skills for project implementation were lacking. The Government of Burkina Faso therefore requested JICA to implement the technical cooperation Project, *Participatory and Sustainable Forest Management in the Province of Comoe (July 2007 - June 2012)*, with the aim of implementing participatory and sustainable forest management activities by local people through the GGF/UGGFs, and the Project was carried out as proposed. With regard to implementation, the project expected that it would be difficult to secure funds from the Government of Burkina Faso to sustain project effects after project completion. The Project therefore sought to achieve a certain level of sustainability by conducting activities for securing funds through local people with leading roles such as the GGF/UGGFs.

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<sup>5</sup> The five Classified Forests (CFs) are Bounouna, Toumousséni, Gouandougou, Kongoko and Dida. The survey activities could not be completed in Dida, for security reasons. Hence, only the four other CFs were determined as targets of the project.

## 1.2 Project Outline

Table 1 Project Summary

Overall Goal	Participatory and sustainable forest management by local people <sup>6</sup> is continuously conducted in four project target Forêt Classée (Classified Forests: CFs).	
Project Purpose	Activities for forest management are commenced in four project target CFs (Bounouna, Toumoussénni, Gouandougou and Kongoko) by local people through the GGF/UGGFs. * GGF, Groupement de Gestion Forestière; UGGF, Union des Groupement de Gestion Forestière	
As to the differences between the overall goal and project purpose, the overall goal means “The forest management activities have been continuously implemented” and the project purpose means “The forest management activities have been commenced.” <sup>7</sup>		
Outputs	Output 1	The national and local forest administrative agencies have an enhanced capacity to support the local people in implementing participatory forest management.
	Output 2	The GGF/UGGFs have an enhanced capacity in sustainable forest management in the target villages.
	Output 3	The living conditions of the local people are improved.
	Output 4	The plan d’aménagement et de gestion forestière (PAF) in the four target CFs is formulated and put into practice.
	Output 5	The cooperative relationship between the national/local administrative agencies and forest administrative agencies is strengthened to implement sustainable forest management.
Total cost (Japanese Side)	463 million yen	
Period of Cooperation	July, 2007 - December, 2012 (Expanded period: July, 2012 - December, 2012)	
Implementing Agency	<ul style="list-style-type: none"> <li>• Forest Department (Direction des Forêt : DiFor), Directorate General for Natural Conservation (Direction Générale de la Conservation de la Nature : DGCN), Ministry of Environment and Sustainable Development (Ministère de l’environnement et du développement durable : MEDD)</li> <li>• Regional Directorate for Environment and Sustainable Development in Cascade (Direction Régionale de l’Environnement et du Développement Durable : DREDD, Cascades)</li> <li>• Provincial Directorate for Environment and Sustainable Development in Comoe (Direction Provinciale de l’Environnement et du Développement Durable : DPEDD, Comoé)</li> </ul>	
Other Relevant Agencies/ Organizations	N.A.	
Supporting Agency /Organization in Japan	Forestry Agency in Ministry of Agriculture, Forestry and Fisheries, Japan Forest Technology Association (JAFTA)	

<sup>6</sup> Local people mean GGF and UGGF members who live in target areas. The direct beneficiaries of the Project at the project planning stage consist of GGF members (approx. 950) and UGGF executive board members (approx. 32) who assume forest management roles in each CF, forest administrative staff from the Ministry and Comoe province, and forest officers (approx. 20). The indirect benefit reached were approximately 36,000 people living around the four CFs, 80,000 people living in Banfora and areas around Banfora where forest products are mainly sold, and 15 forest officers in Cascade province (excluding the Comoe Province). The local people were assumed to be the people living around the CFs at the project planning stage. After the project commenced, a clear distinction was made between the people who lived around the CFs (hereinafter referred to as “villagers”) and the GGF/UGGF members. The recommendation was made and approved by persons related to the Project that the project focus on the improvement of the livelihoods of GGF/UGGF first, and improvement of the livelihoods of villagers would be led by GGF/UGGF’s initiatives in the future. Therefore, the latter was assumed mostly not to receive any physical or direct benefit from the project activities. (Source: Documents provided by JICA, interviews with the Japanese consultant)

<sup>7</sup> The original overall goal and project purpose were overlapping in this project, thus for the ex-post evaluation, they were redefined as mentioned.

Related Projects	<p><u>Technical Cooperation Project</u></p> <ul style="list-style-type: none"> <li>• The Study on the Management of Forest Reserves in the Province of Comoe (2002 - 2005)</li> <li>• Project of Support for Seedling Production Sector (2010 - 2013)</li> </ul> <p><u>Grant Aid Project</u></p> <ul style="list-style-type: none"> <li>• Project for Rehabilitating of Regional Nurseries (1999 - 2000)</li> <li>• The Project for the rehabilitation and reinforcement of the capacity of National Center of Forest Seed and four regional forest seed departments (2004 - 2005)</li> </ul> <p><u>Other International Organization and donors</u></p> <ul style="list-style-type: none"> <li>• Financial Investment Program<sup>8</sup> (Establishment year : 2008, The 1<sup>st</sup> Phase : 2009 - 2015)</li> </ul>
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(Source: Documents provided by JICA)

### 1.3 Outline of the Terminal Evaluation

#### 1.3.1 Achievement Status of Project Purpose at the Time of the Terminal Evaluation

It was confirmed, at the terminal evaluation, that the zoning for forest management in each CF was conducted in accordance with Forest Development Goals<sup>9</sup>, in order to clarify the zoning borders fundamental to forest management activities (Indicator 1). Because the forest management activities were confirmed to have been implemented in accordance with these goals as of the terminal evaluation (Indicator 2), there were expectations that the project purpose might be achieved by the time of project completion. The achievement of each output refers to Table A in Attachment-1.

#### 1.3.2 Achievement Status of Overall Goal at the Time of the Terminal Evaluation (including other impacts.)

The formulation of the PAF in each CF was in the final stage. Positive impacts were generated in terms of both improved income for GGF members and improved relations between forest officers and the GGF/UGGFs. Given that the sales mechanism for forest products is starting to function, good relationships with local private companies are ongoing, and sales channels for forest products are developed, the overall goal was more likely to be achieved by the time of the ex-post evaluation.

#### 1.3.3 Recommendations at the Time of the Terminal Evaluation

Table 2 shows six recommendations for the rest of the project period pointed out in the terminal evaluation, and the follow-up situation as of the ex-post evaluation.

<sup>8</sup> The program was a multilateral fund mechanism of the United Nations established by the World Bank to support climate control in developing countries.

<sup>9</sup> Refer to Table C in Attachment-1.

Table 2 Recommendations as of the terminal evaluation  
and follow-up condition as of the ex-post evaluation

N O	Recommendations as of the terminal evaluation	Follow-up condition as of ex-post evaluation
1	Japanese experts were evacuated temporarily from Burkina Faso for three months due to deteriorating public safety, making it difficult to achieve Output 4. The project period is therefore extended.	In consideration of the results of the terminal evaluation, the project period was extended for six months and terminated in December, 2012.
2	The PAF formulated by the Project is approved at the national level. A mechanism for official sharing of the contents of the PAF with persons related to the Project is developed.	As a result of the consultation between JICA and MEDD, the approval of the PAF was confirmed to be difficult at the national level during the project period. It was therefore determined that approval at the regional level was to be targeted. As a result, the PAF was approved by the provincial approval committee of the PAF and regional approval committee of the PAF on 9 <sup>th</sup> and 16 <sup>th</sup> November, 2012, respectively. The PAF was not yet approved, however, at the national level by the time of ex-post evaluation, and no mechanism for sharing the approval process among persons related to Project was sufficiently developed.
3	Determine a policy to assure the sufficient use of the Guide on the methodology for forest development and the Manuals for the participatory and sustainable forest management practices prepared by the Project.	A “Workshop for dissemination of the Guide and Manuals”, an activity targeting forest officers and resource persons related to forest management in the Cascade region, was conducted on 14 <sup>th</sup> September, 2012. The utilization of the Guide and the Manuals by persons/agencies related to forest management such as Ecole nationale des eaux et forêts (ENEF) as a course material was discussed.
4	In order for UGGFs to be able to play a role in both coordinating activities among the GGFs and negotiating with other agencies/institution/private companies including customers of forest products, the capacity of the UGGFs is strengthened	GGF/UGGF executive board members <sup>10</sup> took the initiative in negotiating with Rakieta Association and Phytofla Laboratory concerning the supply of non-timber forest products, instead of Japanese experts who previously played a central role in this negotiation. As a result, GGF/UGGF executive board members’ capacity to negotiate was improved.
5	Practical experience related to continuous forest preservation activities by the GGF/UGGFs is accumulated as knowledge. Opportunities are set up for sharing the experience with donors and NGOs in addition to persons related to the Project.	In order to inform the project outputs and accumulate the experience as knowledge, a documentary video presenting project outcomes was produced as an initiative of JICA Burkina Faso Office and distributed to related forest management agencies. In addition, forest administrative agencies at the national, provincial, and departmental levels and persons related to forest management were invited to a seminar conducted on 23 <sup>rd</sup> November, 2012 to share the project overview and the project outputs.
6	The results of the terminal evaluation were shared with persons related to the Project. Discussion among these persons on the possibility of extending the project period is needed.	The extension of the project period was discussed among persons related to the Project. A “Record of the Discussion” which described the extension of the project period for six months was signed by JICA and MEDD.

(Source: Documents provided by JICA and Results of the interviews with the Japanese consultant)

<sup>10</sup> GGF/UGGFs executive board members are basically comprised of seven people: representative, secretary, accountant, organization enhancement staff, communication staff, fund manager, and advisor. In addition to this, some GGF/UGGFs station vice secretary, vice accountant, vice organization enhancement, vice communication and forest management depending on the situation within GGF/UGGFs. Although the number of women in the executive board varies depending on GGF/UGGFs, it is confirmed that each board has at least 2-3 women members and about half at most in each executive board. It is also confirmed that forest officers care about the promotion of women's participation for example whether women that are actively participating in forest management activities when the officers support GGF.

## 2. Outline of the Evaluation Study

### 2.1 External Evaluator

Chiaki Yamada (Value Frontier Co., Ltd.)<sup>11</sup>

### 2.2 Duration of Evaluation Study

The study of the ex-post evaluation was carried out during the following periods.

Duration of the Study: July, 2015 - April, 2017

Duration of the Field Study: February 29 - March 18, 2016, May 30 - June 6, 2016

## 3. Results of the Evaluation (Overall Rating: B<sup>12</sup>)

### 3.1 Relevance (Rating: ③<sup>13</sup>)

#### 3.1.1 Relevance to the Development Plan of Burkina Faso

##### 3.1.1.1 Relevance to Higher Development Plan

At the time of the ex-ante evaluation of the Project, *Poverty Reduction Strategy Paper II (PRSP II)* (2004), a development plan of Burkina Faso targeted the conservation of CFs for ecosystem management and the provision of goods and services to people.

At the project completion, *Strategy for Growth and Sustainable Development (SGSD) (2011-2015)*, a strategy formulated after *PRSP II*, stressed the importance of the mitigation of forest degradation and effective utilization of forest resource for ensuring environmental sustainability as one measure for poverty reduction.

##### 3.1.1.2 Relevance to Environmental Sector Plan

At the time of the ex-ante evaluation of the Project, *NFP* (1995) aimed to create employment and stabilizing people's income while engaging forest conservation and management with the sustainable utilization of this natural resource. *National Program for Forest Management (NPFM)*, a program for executing *NFP*, established a goal related to sustainable forest management by the local people and promoted its implementation. *Forest Act* (1997) stated that "Forests are national properties and that sustainable forest management is an obligation of the people. Forests are developed in participatory approach." In particular, Article 39 specified that "Forest management is implemented based on the PAF rules approved by MEDD, in charge of forest management." Furthermore, rules that stressed the importance of a participatory approach, including rules on livelihood improvement through the participatory forest management by the local people, were described in the *Guideline for Forest Management* (2002).

*NFP* (1995) and *NPFM* (1996) were continuously valid at the project completion. The

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<sup>11</sup> The evaluator is a subcontractor from INGÉROSEC Corporation.

<sup>12</sup> A: Highly satisfactory, B: Satisfactory, C: Partially satisfactory, D: Unsatisfactory

<sup>13</sup> ③: High, ② Fair, ① Low

*Forest Act (2011)*, stated the promotion of sustainable forest management which the *Forest Act of 1997* similarly stated. There was no change in the positioning of forest management in the *Guideline for Forest Management* at the time of the project completion. There were newly confirmed descriptions of efforts to promote the establishment of the GGF/UGGFs as entities with key roles in management in the CFs. The *Rural Sector National Program (2011-2015)*, an initiative newly established though not yet formulated at the time of the ex-ante evaluation of the Project, emphasized the sustainable development of natural resources as one of the axes in the national strategy. The program also stated that forest management and preservation and appropriate management of forest ecosystems are a prioritized challenge.

As mentioned above, from the time of the ex-ante evaluation to the project completion, as a prioritized sector for poverty reduction, the needs for sustainable natural resources development such as the effective use of forest resources had been shown consistently.

### 3.1.2 Relevance to the Development Needs of Burkina Faso

The total forest area in Burkina Faso was 6,847,000ha in 1990 and had dramatically decreased by about 13.1% as of 2005. The decrease in forest area was significant (FAO<sup>14</sup>, 2010). The decrease was attributed to an increased demand for forest resources due to the growth of the population, while people rely on forest resources as a major source of domestic energy (FAO, 1996)<sup>15</sup>. The drastic decrease of forest resources was to be slowed through appropriate and sustainable forest management. Additionally, the forest officers have moved away from their role of conventional forest monitoring towards forest management in cooperation with the local people and support for the activities implemented by the local people. The forest officers were required to re-realize their own roles and acquire skills for both participatory and sustainable forest management and the monitoring and evaluation of forest management activities by the local people.

It was confirmed at the project completion that the degradation or loss of forests was still remarkable not only in the Northern part of Burkina Faso, where serious deforestation was spreading, but also in the Southern part, where forest resources were still relatively rich. The forest area of the country declined from 5,649,000ha in 2010 to 5,467,000ha in 2013. The rate of decrease increased from 0.9%/year in the 1990s to 1.0%/year since 2010 (FAO, 2010 and 2015)<sup>14</sup>. The Cascade region, where the project target areas are located, has an electrification rate of 23.8% (Ministere De L'economie Et Des Finances, 2010)<sup>16</sup>. While some households use gas as an energy source, most are obliged to rely on forest resources for their domestic energy. In view of these situations, there was a need for the Government of Burkina Faso and Aid

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<sup>14</sup> Global Forest Resources Assessment (Food and Agriculture Organization of the United Nations: FAO)

<sup>15</sup> Domestication and commercialization of non-timber forest products in agroforestry systems (FAO)

<sup>16</sup> L'Enquête intégrale sur les conditions de vie et des ménages (2010)

agencies to organize training for participatory sustainable forest management, targeting the forest officers at the local administration level. While the decentralization was in progress in particular, it is confirmed that the importance of training for forest officers who can implement appropriate forest management was stressed. This project was implemented with the aim for improving the forest management skills of the forest officers. And through the project outcomes, the abilities of the forest officers were improved in the project target areas. However, the target areas for the project were limited and the number of forest officers capable of forest management was confirmed to be insufficient to enable an extension of the forest management areas.

As mentioned above, an ongoing need for appropriate and sustainable forest management projects and for improved capacity for forest officers was confirmed to be a requisite at the time of the project completion.

### 3.1.3 Relevance to Japan's ODA Policy

At the time of the project planning, the *Medium-Term Policy on Official Development Assistance (ODA)* (2005) cited correspondence for global issues as a priority issue and declared that Japan's commitment to environmental issues was to be strengthened. The *Country Assistance Policy for Burkina Faso* (2006) stated that rural development through sustainable and effective conservation and utilization of natural resources was a priority area for assistance. The Project, which implements sustainable forest management, was therefore relevant to Japan's ODA policy.

As mentioned above, the implementation of the Project, which contributes to sustainable forest management by the GGF/UGGFs through improved support capability for forest administration agencies and the formulation of the PAF, has been highly relevant to Burkina Faso's development plan and development needs, as well as Japan's ODA policy both at the time of the ex-ante evaluation and the project completion. Its relevance is therefore high.

## 3.2 Effectiveness and Impact (Rating: ③)

### 3.2.1 Effectiveness

#### 3.2.1.1 Achievement of Project Purpose

Project Purpose: Activities for forest management are commenced in four project target CFs (Bounouna, Toumousséni, Gouandougou and Kongoko) by local people through the GGF/UGGFs.

Given that the five following outputs are achieved, the Project is assumed to have achieved its purpose. As for Output 1, in order for GGF/UGGFs to implement participatory and sustainable forest management, capacity of the national and local forest administrative agencies to support the GGF/UGGFs was improved. By enhancing the capacity of GGF/UGGFs in

relation to sustainable forest management (Output 2), the living conditions of the GGF/UGGFs were improved (Output 3). Furthermore, in order for GGF/UGGFs to implement the forest management activities continuously, the PAF was formulated (Output 4). The cooperative relationship between the national and local administrative agencies and forest administrative agencies was strengthened, in order for GGF/UGGFs to implement activities with the aim of the sustainable forest management even after the project completion (Output 5).

The cooperative relationship between forest administrative agencies and the GGF/UGGFs was improved. Forest officers who participated in trainings by the Japanese experts were assigned to give lectures for forest management technical training for the GGFs; thus their cooperation was confirmed. Thirteen existing GGFs confirmed at the ex-ante evaluation were re-activated. Fourteen GGFs were newly established by the Project, so the total number of GGFs reached 27 in total. Two existing UGGFs were re-activated and another two were newly established, so the number of UGGFs reached four in total. Various training activities focused on forest management activities such as activities for institutional enhancement, honey and shea butter production were conducted, which gave the GGF/UGGFs sufficient confidence in their forest management capacity. It was confirmed, at the project completion, that the GGFs were implementing ongoing forest management activities with the use of techniques learned through the training. During the project period, a PAF was formulated for each CF to promote participatory forest management. In addition, three existing manuals for charcoal making, seedling production, and wildfire management were continuously utilized for the Project. Five types of participatory and sustainable forest management practice manuals were newly prepared, and eight types of manuals were ready in total. The achievement of the project purpose is shown in Table 3.

Table 3 Degree of achievement of the project purpose

Purpose	Indicator	Degree of achievement
Project Purpose	Indicator 1: Classified Forests (CFs) are clearly zoned as an underlying foundation for the forest management activities by the GGF/UGGFs	<p><u>Indicator 1: Achieved</u></p> <ul style="list-style-type: none"> <li>In order to clarify the forest zoning border, the following three activities were implemented in the project target CFs.               <ol style="list-style-type: none"> <li>CFs were zoned in land use maps for management.</li> <li>Transect cutting was conducted to clarify forest zones.</li> <li>Sign boards showing forest zoning were manufactured and erected in the CFs (See Figure 3).</li> </ol> </li> </ul>
	Indicator 2: The Forest Development Goals are clarified in each target CF; forest management activities were implemented by the GGF/UGGFs based on the Forest Development Goals	<p><u>Indicator 2: Achieved</u></p> <ul style="list-style-type: none"> <li>According to the interviews with the implementing agency, it is confirmed that the Forest Development Goals in each CF were formulated during the project period and the forest management activities have been commenced based on the target.</li> <li>It was confirmed that from nine to eleven types of activities commenced during the project period were still being implemented at the time of the project completion. Although each GGF commenced various activities during the project period, as a result of the actual implementation of these activities and determination of what activities are suitable for each GGF, seven to eleven types of activities considered appropriate by the GGFs for ongoing implementation were selected at the time of the project completion. The average persistency rate was 94% for the activities (See Table B in Attachment -1).</li> <li>At the project completion, seven out of eleven activities<sup>17</sup> were being continued by all GGFs. It was confirmed that some GGFs stopped implementing the other four activities. Although the GGFs were confirmed to have decreased the number of activities during the project period up to the project completion, this decrease was due to thorough deliberations on which activities were suitable for each GGF.</li> </ul>

(Source : Documents provided by JICA, Interviews with the implementing agency, Beneficiary survey<sup>18</sup>)

As shown in Table 3, zones for forest management activities were clarified and a PAF was formulated in each CF for the implementation of forest management activities by the GGF/UGGFs. Moreover, the activities for achieving the forest management target set by the Project were commenced during the project period and the ongoing implementation of these activities was confirmed at the project completion. Therefore, the project purpose is deemed to have been achieved.

<sup>17</sup> The eleven types of activities are as follows: clearing space for fire protection, honey production, shea butter production, Sumbala production (seeds of *Parkia Biglobosa* (leguminosae) and products processed from them are used for food such as soups), saba syrup production (Saba *Senegalensis* is a naturally grown vine plant mainly processed to make syrup), seedling production, afforestation, medical plant utilization, logging, charcoal making, and pasture grass production.

<sup>18</sup> Beneficiary survey consists of targeted three groups, four UGGF executive boards, 27 GGF executive boards and GGF members. In the four CFs, executive board members of both four UGGFs and 27 GGFs, and 270 GGF members randomly selected out of 1,665 in total answered the questionnaire in face-to-face interviews. The male-to-female ratios in the mixed interviews in each GGF were deemed to roughly match the ratios in the total GGF memberships, as were the ratios of the scale of members in each GGF/UGGF to a maximum extent. There are more women GGF members than there are men (See Table 4.1). This is because there are many activities such as shea butter production and quality improvement of Sumbala that women traditionally handle. The specific number of members interviewed is shown in Table D in Attachment - 1.



Figure 3 Forest zoning signboard in a CF



Figure 4 GGF members drying doribara<sup>19</sup>

### 3.2.2 Impact

For the evaluation of the overall goal, “participatory and sustainable forest management by local people is continuously conducted”, whether the local people continue the following two activities based on the PAF is evaluated. The first is the function of the CFs upgraded through the caring for forests<sup>20</sup> such as planting, thinning, or pruning of trees, and the second is forest products produced and sold by the local people in the targeted areas. Effects generated by the implementation of the forest management (change or improvement of the forest state such as increased absorption amount of carbon, reduced illegal logging, and conservation of biodiversity) are omitted from consideration in the evaluation of the achievement of the overall goal. As the specific activities described in the two activities mentioned above had been initiated during the project period, the continuity of these activities after the project period is evaluated. If the GGF/UGGFs continuously implement forest management activities appropriately based on the PAF after the completion of the Project, the overall goal is considered to be achieved. In order for the GGF/UGGFs to continue the forest management activities appropriately, securing budgets are necessary in this regard. That, in turn, requires not only the ongoing use of the sales channels exploited during the project period for selling forest products, but also new sales channels for continuing the forest management activities. Moreover, the GGF/UGGFs are expected to secure and supply stable products, and thereby secure well-established sale income. For the achievement of the overall goal going forward, it is necessary for GGF members to remain members for a longer time and acquire established techniques.

#### 3.2.2.1 Achievement of the overall goal

Overall goal: Participatory and sustainable forest management by local people is continuously conducted in four project target Forêt Classée (Classified Forests: CFs).

Table 4 shows the indicators to measure the overall goal and the level of achievement of

<sup>19</sup> Doribara is a medical plant and its academic name is N’ dribala. Dried dribara is used as medicine to prevent malaria.

<sup>20</sup> Based on the internal regulation of GGF, all GGF members are obliged to participate in an activity such as caring for forests which does not generate income. However, compensation is not paid to GGF members if GGF participate in such activities.

each indicator. As the Indicator 1 was redundant with one of the indicators for project purpose, the Indicator 2, “The number of GGF members is increased”, was added in order to measure the achievement of the overall goal appropriately at the time of the ex-post evaluation. Thus achievement of the overall goal was measured based on the two indicators.

Table 4 Degree of the achievement of the impact

Goal	Indicator	Degree of achievement																																															
Overall Goal	Indicator 1 : Activities introduced by the Project in the four target CFs are implemented continuously by the GGF/UGGFs based on the PAF	<p><u>Indicator 1: Achieved</u></p> <ul style="list-style-type: none"> <li>The beneficiary survey confirmed that all GGF/UGGFs have implemented the activities based on the PAF continuously as of the ex-post evaluation. The average persistency rate for the activities is 85% (See Table B in Attachment-1).</li> <li>However, regarding one of the forest management targets in the PAFs formulated by each CF, which is “to secure supply of goods to large consumption areas such as Bobo Dioulasso,” GGF/UGGFs have been struggling to achieve this as sales channels have yet to progress, primarily due to lack of funds. It is confirmed that targets (except those mentioned above) are achieved at the ex-post evaluation.</li> </ul>																																															
	Indicator 2 : The number of GGF members is increased	<p><u>Indicator 2: Not achieved</u></p> <ul style="list-style-type: none"> <li>The numbers of GGF members in the Bounouna UGGF, Toumoussénni UGGF, and Kongoko UGGF as of the ex-post evaluation are either unchanged or slightly decreased from the last tally at the project completion. On the other hand, the number of GGF members in the Gouandougou UGGF decreased by approximately 20% versus that at the project completion.</li> </ul> <p>Table 4.1 Change in the numbers of GGF members (Unit: person, except for the rate of increase-decrease (%))</p> <table border="1"> <thead> <tr> <th rowspan="2">Name of UGGF</th> <th colspan="2">At the project completion</th> <th colspan="2">At the ex-post evaluation</th> <th colspan="2">Rate of increase-decrease (%)</th> </tr> <tr> <th>M</th> <th>F</th> <th>M</th> <th>F</th> <th>M</th> <th>F</th> </tr> </thead> <tbody> <tr> <td>Bounouna</td> <td>19</td> <td>90</td> <td>17</td> <td>87</td> <td>-11</td> <td>-3</td> </tr> <tr> <td>Toumoussénni</td> <td>105</td> <td>227</td> <td>93</td> <td>227</td> <td>-11</td> <td>±0</td> </tr> <tr> <td>Gouandougou</td> <td>211</td> <td>405</td> <td>176</td> <td>339</td> <td>-17</td> <td>-16</td> </tr> <tr> <td>Kongoko,</td> <td>290</td> <td>383</td> <td>335</td> <td>391</td> <td>+16</td> <td>+2</td> </tr> <tr> <td>Total</td> <td>625</td> <td>1105</td> <td>621</td> <td>1044</td> <td>-1</td> <td>-6</td> </tr> </tbody> </table> <p>(M: Male, F: Female)</p>	Name of UGGF	At the project completion		At the ex-post evaluation		Rate of increase-decrease (%)		M	F	M	F	M	F	Bounouna	19	90	17	87	-11	-3	Toumoussénni	105	227	93	227	-11	±0	Gouandougou	211	405	176	339	-17	-16	Kongoko,	290	383	335	391	+16	+2	Total	625	1105	621	1044	-1
Name of UGGF	At the project completion			At the ex-post evaluation		Rate of increase-decrease (%)																																											
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(Source: Beneficiary survey)

For the Indicator 1, eight out of 11 activities sustained at the project completion were still being continued by more than 80% of the GGFs at the time of the ex-post evaluation. As forest management activities were discussed and reselected within each GGF in response to the local situation and market demand, the communication within GGFs was considered good and the GGFs made appropriate arrangements to sustain their activities. Eight out of 11 GGFs engaged in the production of saba syrup and nine out of 18 GGFs engaged in charcoal

manufacture had stopped those activities by the time of the ex-post evaluation. A high non-persistence rate was observed within two activities. The saba syrup production was discontinued due to difficulties in procuring bottles necessary for the activity. Concerning charcoal, as it was indispensable for daily life, there were many people who produced coal in places other than CFs. Regarding the sales of charcoal, there were no outstanding features in the charcoal produced in CFs compared to the charcoal produced in other areas, therefore, it was not able to dominate in sales.

For the Indicator 2, the beneficiary survey confirmed that the GGF members increased in Kongoko UGGF. In Bounouna UGGF, Toumousséni UGGF, and Gouandougou UGGF, meanwhile, the number of GGF members was decreased. One reason for the decreased number of GGF members was a failure of the activity to bring in the target income defined in the PAF. Another reason was that the GGF executive board members decided to limit GGF memberships to people who were eager to commit to forest management activities, who actively participated in them regularly, and who regularly paid their membership fees<sup>21</sup>. The decision was made in the course of discussing the terms and conditions of membership for the implementation of sustainable activities. Some members reported that new membership rules pared out less motivated members. With only the highly motivated members remaining within the GGFs, they explained, their activities had become more active and motivated. The same point was confirmed through the interviews with the implementing agency (forest officers).

As mentioned above, although the number of GGFs members had decreased between the time of project completion and the time of ex-post evaluation, approximately 80% of the GGF members continued the forest management activities using the skills learned and experience obtained during the project period. Project effects were delivered continuously as a result. Although the GGF/UGGFs kept no accounting books, they carried on their activities based on the PAF. The GGF/UGGFs also responded appropriately to the situations at hand, for example, by adjusting sales price to suit the current conditions. As such, the rate of project goal achievement is rated as high.

### 3.2.2.2 Impact generated by the Outputs and Project Purpose

#### 1. (Impact generated by Output 1) Changes in the implementing agency (among departmental forest officers)

According to the beneficiary survey, the departmental forest officers who work closely with the GGF/UGGFs gained a better understanding of participatory forest management through the Project. As a result, the GGFs and departmental forest officers enjoyed better relations and engaged in more frequent communications as of the project completion. As of the ex-post evaluation, all 27 GGFs answered that, “The forest officers understand the activities of the

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<sup>21</sup> The membership fees are 300-2,000FCFA/month (680FCFA/month on an average) and they vary by GGF.

GGFs better now compared to the beginning of the project planning. The better relationship built through the project period is still maintained”.

## 2. (Impact generated by Output 2) Continuity of activities

With regard to continuity of the forest management activities, it was confirmed as of the ex-post evaluation that some GGFs stopped some of the activities that they started during the project implementation period although they had received training. It is because that the GGFs had discussed these activities and had deliberately chosen to discontinue them in light of the local situation and market demand. Three of the 11 forest management activities, namely, wildfire management, shea butter production, and seedlings production, had particularly high persistency rates. The persistency rates for activities such as saba syrup production and charcoal manufacturing, on the other hand, were quite low.

## 3. (Impact generated by Output 3) Improvement of the living conditions of GGF members

According to the beneficiary survey, about 96% of GGF members (260 out of 270 members) answered that they had increased their household income by the time of the ex-post evaluation, compared with their income before the project implementation. The increased income was derived from the sales of forest products. The average annual income<sup>22</sup> from forest products increased from about 3,000FCFA<sup>23</sup>/year at the project planning stage to about 58,000FCFA/year as of the ex-post evaluation<sup>24</sup>. Additionally, about 87% of GGF members (235 out of 270 members) answered that, “Communication amongst GGF members has become more detailed and frequent”. About 24% of GGF members (65 out of 270 members) answered that, “We are enjoying the forest management activities”. In response to the question on “GGF member satisfaction with the project”, all 270 members answered that they were satisfied with the project effects. The major reasons for their satisfaction were increased income, increased knowledge of forest management, and strengthened community ties. GGF members are not supposed to obtain forest products in CFs for personal use. Instead of the members, GGF/UGGFs sell the forest products and distribute their sales to GGF members. Therefore, collection of more forest products by GGF members would not directly lead to improvement in individual living.

## 4. (Impact generated by Output 3) Reinvestment situation

Through the beneficiary survey, it was found that about 48% of GGFs (13 out of 27 GGFs) reinvested in equipment and materials necessary for forest management activities as of the

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<sup>22</sup> Average income among GGF members who responded to the beneficiary survey.

<sup>23</sup> FCFA is a common currency used mainly in the former French West and Equatorial African countries.

<sup>24</sup> It is assumed that limiting GGF members to people who were eager to commit to forest management activities and acquired knowledge and skills on forest management activities contributed to the increase of the average annual income of GGF members.

ex-post evaluation. The remaining GGFs (14GGFs) did not reinvest in their activities considering the following factors: (1) activity status, (2) GGF scale, and (3) need for thorough maintenance of equipment and materials purchased during the project period. Because of these reasons, at the time of the ex-post evaluation, it was confirmed that they considered the reinvestment was unnecessary, thus they were saving money for future reinvestment.

5. (Impact generated by Output 4) National approval process of PAF

The interviews with the implementing agency confirmed that the PAF was already formulated but had yet to be approved at the national level<sup>25</sup> due to the lack of a formal approval process for the PAF in MEDD. It was confirmed that no PAF in Burkina Faso had yet been officially approved at the national level. However, the implementing agency recognized the necessity that all of the PAFs, including that under this project, be approved. Legal Department within MEDD has been working since 2015 to establish an official approval process for the PAF.

6. (Impact generated by Output 5) Cooperation with three private companies and one association

According to interviews with three companies and one association<sup>26</sup> that were working together with the GGF/UGGFs at the time of the project completion, GGF/UGGFs still had sales relationships with two of the companies, A-Danse Company and Phytofla Laboratory. They were no longer cooperating with Bomba Techno or the Rakieta Association. The cooperation with Bomba Techno was no longer needed because that company's technology had already been transferred to the GGFs during the project period. The Rakieta Association, meanwhile, was no longer operating by the time the interviews were conducted. A-Danse Company, Phytofla Laboratory, and the leadership of the GGF/UGGFs were all keen to continue their current relationship. While no new partnerships with companies or associations have commenced since the project completion, it was confirmed that the GGF in Bounouna set up a forest product sales office in an attempt to open up a new market (See Figure 6).

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<sup>25</sup> PAF was approved by the provincial approval committee of the PAF and regional approval committee of the PAF on 9<sup>th</sup> and 16<sup>th</sup> November, 2012, respectively.

<sup>26</sup> The three private companies are a Japanese company limited called A-Danse and two private local companies called Phytofla Laboratory and Bomba Techno. The association is a civic association called Rakieta Association.



Figure 5 Doribara production



Figure 6 Forest products sale office operated by Bounouna UGGF<sup>27</sup>

7. (Impact generated by effects of the project) Appropriate forest management and changes in the status of the forests

According to the interviews with the Japanese experts and the implementing agency, the project target areas were classified as CFs. Until then, no PAF was formulated in these CFs, forest management were not carried out appropriately, and illegal logging and hunting were taking place in these areas. According to the forest officers, the number of illegal logging and hunting incidents reduced after appropriate forest management were put in place. However, the data on the impacts or changes in the status of the forest status resulting from this project were not available.

3.2.2.3 Other impacts

1. Impacts on the Natural Environment

Based on the interviews with the implementing agency and Japanese experts, it was confirmed that the CFs were a mixture of conserved forests and productive forests<sup>28</sup>. Because all of the GGF/UGGFs implemented forest management activities in a proper manner in the CFs, the number of illegal logging and hunting incidents were reduced. Thus, the CFs can be said to be properly conserved. At the ex-post evaluation, the information on the tree species in the CFs was available, but not on the number of trees and areas where trees were planted. Thus, while increased carbon absorption in the CFs was estimated, the degree of contribution towards reduction of greenhouse gas emission was not measurable.

2. Land Acquisition and Resettlement

As the project activities were implemented in existing CFs, no land acquisition or resettlement took place as a result of the project implementation.

<sup>27</sup> Shea butter, saba syrup, and sumbala are sold in the forest products sale office run by Bounouna UGGF.

<sup>28</sup> Most of the PAFs are conserved forests where logging and afforestation are not done. Places where afforestation is implemented partly are classified as productive forests.

### 3. Other indirect project impacts

- According to the beneficiary survey and interviews with the implementing agency, the local NGO named Natural Resources and Wildlife Management Association conducted a study to the activity status of some GGF members who were beneficiaries of this project. The survey confirmed that the NGO was making an effort at improving forest management activities by introducing locally tailored methods into their activities and etc., in order to sort out issues that had been raised as of the project completion. Note, also, that according to the interview with the headmaster of the Ecole nationale des eaux et forêts (ENEF), the ENEF used the *Manual on Grazing Management Techniques* as a book of reference. The *Guide on Forest Management Methodology* and another four manuals from the project were also used as the main textbooks in their lectures.
- Through the interviews with the implementing agency, it was found that activities and preparations for the formulation of a new PAF were underway. At Niangoloko Department in Comoe Province, the formulation of a new PAF was under preparation with help from the international organization such as the International Union for Conservation of Nature and Natural Resources. People working for the formulation of the new PAF in Niangoloko participated in both the joint coordination committee (JCC) and the GGF training during the project period. In the JCC, they learned that one of the Bounouna CFs was managed appropriately under GGF/UGGF management even after the project completion. This alerted them to the need for the formation of the PAF in Niangoloko. New activities for the formulation of the PAF were also observed at three UGGFs (Kuinima, Kua, and Hippos Pond) in Houet Province<sup>29</sup>. These three UGGFs participated in the training during the project period, which gave them the opportunity to get to know the PAF and to learn that the implementation of forest management based on PAF enables forests to be managed appropriately. Additionally, after the project completion, the members of these GGFs saw tangible improvements in their living conditions as a result. It can be said that this beneficial outcome promoted and increased new activities for the formation of the PAF.

Turning to the project purpose, the areas for GGF/UGGF forest activities were clearly zoned, as described earlier. The GGFs, equipped with the techniques and knowledge learned through the training, had continued most of the activities that were started during their operations (94% persistency rate). It can therefore be determined that sustainable forest management activities have been carried out by the GGF/UGGFs. Turning to the achievement of the overall goal, the GGF/UGGFs implemented ongoing activities in line with the PAF (persistency rate of 85%), albeit without recording any data in accounting books or the like. Although the number of

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<sup>29</sup> Houet Province is located in the southwest area, named Haut Bassins, of Burkinafaso.

members has decreased slightly, the members retained in GGFs are of a sufficiently high quality and it was concluded that the overall goal has been achieved. In addition, the beneficiary survey revealed that approximately 96% of the local people have improved their income through selling forest products and have continued their relationships with the private companies and association. As a ripple effect of the Project, in terms of the formulation of a PAF, was confirmed in other areas where they have been inspired by the Project and the decrease of illegal logging, the impact is rated as high. Therefore, as the project effects generated by the Project as planned were confirmed, effectiveness and impact of the Project are high.

### 3.3 Efficiency (Rating :②)

#### 3.3.1 Input

The planned and actual project inputs are shown in Table 5.

Table 5 Plan and actual of the project inputs

Project inputs	Planned	Actual (at project completion)
(1) Experts dispatched	3 long-term experts <sup>30</sup>	6 long-term experts <sup>31</sup> (103.5 man months)
(2) Training in Japan	Not mentioned	4 members
(3) Materials & equipment provided	Four-wheel drive vehicles, off-road motorbikes, equipment for forest management, materials and equipment required for the activities supporting the local people	Vehicles, motorbikes, other equipment and materials costing about 3 million yen, As an infrastructure development for forest management; cutting down trees and plants were conducted for forest zoning clearly; and 27 warehouses were constructed for the storage of equipment and materials for the GGFs.
(4) Local cost burden	Not mentioned	46 million yen
(5) Others	Not mentioned	3 facilitators
Japanese side Total Project Cost	Total 380 million yen	Total 463 million yen
Burkina Faso side Total Project Cost	Total 39 million yen	Total 25 million yen

(Source: Documents provided by JICA, Interviews with the implementing agency)

#### 3.3.1.1 Elements of Inputs

##### 1. Japanese side

- Although no Japanese experts such as participatory development and livelihood improvement were initially planned as project input, the necessity of these experts for promoting a participatory approach encompassing livelihood improvement through forest management was confirmed. Three Japanese experts were therefore added as inputs from the Japanese side. This made the project possible to conduct the project activities from a multilateral perspective. Additionally each expert performed activities in a collaborative

<sup>30</sup> One chief advisor, one participatory forest management, and one coordinator. Man months are not described.

<sup>31</sup> One chief advisor/forest management, one deputy chief advisor/forest management, participatory rural development (1) and participatory rural development (2), one coordinator and one training management.

way; hence these added inputs produced more positive project effects.

- After the project commencement, the necessity of facilitators who can understand local languages and French and are familiar with the project target areas and its circumstances were confirmed in order for the Project to establish relationships with the GGF/UGGFs, communicate smoothly, and implement the forest management activities. Based on the facts found, three facilitators were also newly added as project inputs. Considering the project implemented through participatory approach, facilitators to support the GGF/UGGFs directly were vital and had to be assigned as of the ex-ante evaluation. The importance of the facilitators was also confirmed at the ex-post evaluation by both the beneficiary survey and interviews with the implementing agency. In spite of the time constraints faced during the ex-ante evaluation, the importance of the facilitators for the project implementation should have been recognized and facilitators also had to be assigned into the Project.

## 2. Burkina Faso side

- Only one national coordinator was assigned to the project as a counterpart, chiefly due to a budget decrease and delay. Overall, the inputs from the Burkina Faso were not planned appropriately and this became an obstructive factor for the project implementation. The Japanese side responded to the budgetary shortfall by supporting the expenses. After it provided the expenses, the Burkina Faso side was able to fund their budget and the cost burden on the Japanese side was reduced.

### 3.3.1.2 Project cost

The actual project cost from the Japanese side was 463 million yen, while the planned cost was 380 million yen. Therefore, the actual project cost was higher than planned (121% of the planned cost). The increased cost was mainly attributed to the following three points.

- 1) Infrastructure development for the purpose of forest management such as development of roads around the CFs, and transect cutting for clarifying forest zones;
- 2) Construction of warehouses for storing project equipment and materials in each GGF; and
- 3) Additional employment of three facilitators not included in the plan.

Although point 1) was not allocated in the project cost at the ex-ante evaluation, JICA and the persons related to the project agreed at the project commencement stage that a minimum of infrastructure construction would be necessary to achieve the project purpose. Eventually, point 1) was provided by the Japanese side. Concerning point 2), there were initially no warehouses for storing equipment and materials for forest management and forest products. Individual houses in many GGFs therefore had been used instead. Under the decision that in order to manage equipment and materials sustainably and appropriately, the construction of the storage warehouses was necessary, there was a request from the recipient country during

the implementation of the Project. Storage warehouses for equipment and materials were therefore constructed for all 27 GGFs. Concerning point 3) is as mentioned above. There was no change in the output due to this increase in the input, given that additional input was presumably required for the planned output calculation. The facilitators were thus determined to be necessary inputs.

#### 3.3.1.3 Period of Cooperation

Political instability in Burkina Faso forced the Japanese experts to evacuate the country for three months in the 4<sup>th</sup> year of the Project. The project activities were therefore delayed. To make up for the activities that had been suspended during the evacuation time, the project was lengthened by three months followed by another three-month extension. The planned project period was a total of 60 months between July 2007 and June 2012. The actual project period was 66 months between July 2007 and December 2012. After excluding the three months of evacuation and adding the three-month extension, the total project period was 63 months (105% of the planned period) and longer than planned.

As mentioned above, the actual project cost and actual project period both exceeded the plan (121% and 105%, respectively). Therefore, the efficiency of the Project is rated as fair. For the achievement of the outputs and project purpose, the increase of the project cost was determined to be vital for the smooth project management and the extension of the project period was determined to be an indispensable input to deal with factors beyond uncontrollable factors.

### 3.4 Sustainability (Rating:②)

#### 3.4.1 Related Policy and Institutional Aspects for the Sustainability of Project Effects

As of the ex-post evaluation, it was confirmed that due to the PAF being not officially approved by the Government, there was no legal obligation binding the GGF activities based on the PAF, in effect. If, for example, a GGF implemented an inappropriate activity from the viewpoint of forest management, there was nothing binding the GGF to comply with the rules of the PAF. Once the approval process for the PAF is officially set up within MEDD, the Government is required to approve the PAF by following the approval process. It was confirmed from the interviews with the implementing agency that the official approval process for the PAF was discussed within MEDD. It was also confirmed from the interview that the Forest Management Plan, which is a part of the PAF, was valid from 2012 to 2016. The plan therefore needs to be formulated for the targeted period after 2017.

On the other hand, the valid Burkina Faso Development Policies (including sectoral policies) such as *SGSD*, *NFP*, and *NPFM* at the time of the ex-post evaluation prioritized poverty reduction as an important sector. They also aim for forest conservation and management with the sustainable utilization of this natural resource. Generating employment and stabilizing

people's income were also targeted through activities of forest conservation and management. The *Guideline for Forest Management* promotes the set-up of GGFs to implement a participatory approach focused on forest management activities. Article 39 of the *Forest Act* revised in 2011, which remains unchanged from the earlier version of the Act, states that the management of the national forests, including the CFs, should be implemented based on the PAF formulated by the Forest Department and approved by MEDD.

As mentioned above, it is confirmed that the sustainable management of the CFs as national forests with PAF-based participatory approach by the GGF/UGGFs has been continuously recommended. Therefore, the sustainability of the project within the terms of the policies and institutions is rated as high.

### 3.4.2 Organizational Aspects of the Implementing Agency for the Sustainability of Project Effects

In order for the project effects to be sustainable, the GGF/UGGFs are required to continue their forest management activities while each participating agency fulfills their roles. Table 6 and 7 show the roles of the respective agencies (national, regional, provincial and departmental level) confirmed by the interviews with the implementing agency. The CFs targeted by this project are categorized as government-owned areas within the national forests. But the management roles and responsibilities for the national forests are placed into different agencies within the Region, Province, and Departments and are defined.

Table 6 Roles of the agencies connected with the Project

Forest management roles	National level	Regional level	Provincial level	Departmental level
Promotion of forest management by the local people	-	○	○	○
Preparation of PAF (supports for formulating PAF included)	○	○	○	○
Approval of PAF at the national level	○	-	-	-
Approval of PAF at the regional level	-	○	-	-
Approval of PAF at the provincial level	-	-	○	-
Update of PAF <sup>32</sup> (management plan for every five years and development plan for every 20 years)	○	○	○	○
Securing budgets for preparation of PAF	○	-	-	-
Management of forest management fund	-	○	-	-
Monitoring patrol for illegal logging and hunting	-	-	-	○
Supports and monitoring of forest management activities	-	As necessary		○

(Source: Interviews with the implementing agency, Beneficiary survey)

<sup>32</sup> Formulated PAF needs to be approved by provincial, regional and national levels.

Table 7 Roles of UGGF and GGF

Group involved	Roles of forest management activities
UGGF	<ul style="list-style-type: none"> <li>• Coordination and problem resolution inside and outside of GGF/UGGFs</li> <li>• Management of forest management fund jointly with the regional directorate</li> </ul>
GGF	<ul style="list-style-type: none"> <li>• Forest management activities (including monitoring of forests)</li> </ul>

(Source: Beneficiary survey)

Specifically, the departmental office has the role of monitoring the forest management activities. The forest officers at the departmental offices who work closely with the GGF/UGGFs therefore play a key role in the monitoring. It was confirmed as of the ex-post evaluation that necessary communications were exchanged between the Ministry, the Region, the Province, and the Departments. These agencies communicated closely and formed smooth partnerships through reporting by telephone or meetings.

It was also confirmed that the forest officers visited the GGF/UGGFs and provided support to help solve any types of problems when emerging in those groups. At least three forest officers were placed at each of the three target departmental office; shortages in the number of forest officers were not confirmed as a problem.

From the above, the roles and responsibilities of the agencies for forest management are clear, as are the roles of GGF/UGGFs. There are no major issues with the organizational aspects interfering with the project sustainability.

### 3.4.3 Technical Aspects of the Implementing Agency for the Sustainability of Project Effects

According to the beneficiary survey, all 207 respondents answered, “By participating in training activities, we have acquired the necessary skills for providing forest management and gained confidence in our skills of activities”; and further, “Regular meetings are held within the GGFs to maintain our forest management skills, especially our technical competencies. During the meetings, the meeting participants shared the progress of the activities among them and discussed problems generated in the methods or techniques for management to seek for solutions”. Twenty GGF members answered that they had conducted studying sessions together with members of other GGFs. Table 8 shows the rates at which the manuals prepared during the project are being used.

Table 8 Rates at which the manuals are in use (Number of GGFs)

Name of manuals	In use	Not in use	Excluded*1
Technical manual for the quality improvement of shea butter	20	3	4
Technical manual for the quality improvement of sumbala*2	7	3	15
Technical manual on the utilization of medical plants	5	19	3
Technical manual on grazing management	6	9	12
Manual for the improvement of organization capacity	16	11	

(Source : Beneficiary Survey)

(Remark\*1: GGFs not engaged in the activities covered in the manuals are excluded.

\*2: Two GGFs left the question about the “technical manual for the quality improvement of sumbala” unanswered. The other 25 were confirmed to have given valid answers.)

When GGF members face a problem, they tend to solve it by talking to the leaders of each activity or other members instead of using the manual. It was confirmed that the new GGF members mostly learned their skills through direct instructions from experienced GGF members.

According to the beneficiary survey, the equipment (bee boxes, etc.) provided during the project period are properly functioning and still in use, by making necessary repairs upon necessity. The warehouses were set up for storing equipment in the all GGFs and were also confirmed to be still in use, as well. Spare parts for the equipment used for the project activities are basically available in Comoe Province and have been purchased when necessary. No problem in purchase of spare parts is confirmed. There are no reports on technical problems with the maintenance and management of their equipment.

According to the beneficiary survey, as of the ex-post evaluation, all 27 GGFs answered, “Thanks to the skills and knowledge acquired through the training, we keep conducting our forest management activities with confidence”. This is a sound indication that the forest management skills are well established amongst the GGFs. One of reasons that the manual was not often used during the Project was because the manuals were written in French. According to some GGFs, if these manuals had been written in local languages they would have been used more frequently. However, the issue mentioned above was considered during the Project. That being said, the manuals written in French language were the choice by default given the high number of local languages used, so the GGF members who understood French (all male members and some female members) were determined to translate the manuals for the other members. In spite of the low rate of manual use, communications were frequent among GGF members and skills were duly passed on among the members and improved. On the other hand, the skills for the accounting and recording for the appropriate management of the income generated through forest management activities were not adequately established in the GGF/UGGFs<sup>33</sup>. The GGF treasurers were also confirmed to lack adequate information on production and sales amounts for each activity. As a result, the GGFs failed to perform the financial management necessary to assess how far the actual amounts fell short of the PAF targets.

The above findings indicate that the technical skills for forest management activities were appropriate in terms of generating income, while the financial management skills were still poorly established within the GGFs. Thus, financial management is still an issue.

#### 3.4.4 Financial Aspects of the Implementing Agency for the Sustainability of Project Effects

According to the interviews with the departmental forest offices, these offices have the main roles in monitoring and supporting the forest management activities implemented by

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<sup>33</sup> Through Activity 2-2 “Techniques and institutional capacity of GGF/UGGFs existed in areas connected to the Project are enhanced”, “Record and accounting”, and “Management of income” were implemented.

GGF/UGGFs. Although the Government had financial difficulties, fines were collected from persons who illegally log and hunt, and fees from permission certificates issued for logging outside of the CFs were paid to MEDD; thus, there was no budget allocated directly for forest management. Therefore, none of the offices secured an annual budget for monitoring forest management activities.

The project plans initially called for a financial system of the following type to sustain the project effects after the project completion. A part of the GGF income generated through the economic activity was to contribute to the training costs incurred by the GGF/UGGFs and the Forest Management Fund used to cover the monitoring costs of the departmental forest offices. Furthermore, a basic framework enabling the collection of operating funds was supposed to be embodied and established to reliably cover expenses for the activities of the GGF/UGGF executive board members and the maintenance and exchange of equipment and materials provided by the Project. The income for the GGFs was to be broken down into that for the producers, the GGF/UGGF Fund, forest taxes, and the Forest Management Fund.

With respect to situation and plan mentioned above, although the Forest Management Fund is funded from the income generated from forest management activities, the actual sales from the forest management activities under the above conditions have fallen short of the sales estimates in the PAF. Once the dividend was secured for improved living conditions, too little was left over to pay into the Forest Management Fund or cover necessary expenses for monitoring. One reason for the income shortfall for the GGF/UGGFs is the limited access to the market to sell forest products. At the same time, it is confirmed that the GGF/UGGFs lack budget for exploring new sales channels with their current income. The GGF/UGGFs keep no financial records of the sale of forest products, which makes it difficult to verify the actual shortfall of their funds. The ex-post evaluation failed to confirm the difference between the amount targeted under the PAF, the amount sold, and the amount paid into the Forest Maintenance Fund as savings.

On the other hand, all 27 GGFs have been continuing their income-generating activities using the income already received and 13 out of 27 have already made the necessary reinvestments to purchase additional equipment, etc. after the project completion.

In view of above situation, although the ex-post evaluation failed to ascertain the precise shortfall of funds, the above indicates that the shortfall exceeds the estimate mentioned in the PAF. Hence, the GGFs have been struggling to secure funds for monitoring. The GGFs have been improving living conditions and reinvesting in forest activities with the income earned, but there is some concern in terms of financial sustainability.

Some minor problems have been observed in terms of the technical and financial aspects of the implementing agency. The sustainability of the project effects is therefore rated as fair.

## **4. Conclusion, Recommendations and Lessons Learned**

### **4.1 Conclusion**

The objective of this Project was to formulate PAF in four CFs, to improve the capacity of forest administrative agencies for supporting activities and the capacity of GGF/UGGF for sustainable forest management. Moreover, by strengthening the cooperative relationship between forest administrative agencies and the GGF/UGGFs, this Project intends to have the GGF/UGGFs appropriately implement sustainable forest management activities. The implementation of this Project at both the ex-ante evaluation and ex-post evaluation was relevant to the development policy and needs of Burkina Faso, a country where serious decrease in forest areas and related problems have been confirmed and the appropriate implementation of forest management has been an object of focus. The Project also conformed to the measures taken under Japan's ODA policy toward Burkina Faso as of the ex-ante evaluation. The relevance of the Project is therefore rated as high. Regarding the effectiveness of the Project, zoning borders were clarified in the target CFs, and the GGF/UGGFs acquired forest management knowledge and techniques through the project implementation. In addition, the PAF was formulated and forest activities were commenced based on the PAF. Moreover, as a series of flows were developed for the sale of forest products, one of the main project purposes, namely, that expected "activities be implemented for forest management by the local people", was achieved. The GGF/UGGFs have continuously implemented activities in accordance with the PAFs. Although members in three out of four GGFs have decreased, all of the members pay GGF membership fees and continuously implement forest management activities. The overall goal, which aims at practicing ongoing forest management (or ongoing implementation of the activities) by the local people, was therefore achieved. Moreover, the living conditions of the local people were drastically improved and ongoing cooperation between companies/associations and GGF/UGGFs was confirmed. Another project effect, such as the implementation of activities for formulating the PAF in other areas, was confirmed, so the project impact is also rated as high. From the reasons mentioned above, the effectiveness and impact of the Project are rated as high. The project cost and project period both exceeded the plan, so the efficiency of the plan is rated as fair. Concerning the project sustainability, no problems were observed in institutional and technical aspects. The fund management capacity, however, has not been firmly established in the GGFs, and the GGF/UGGFs failed to secure necessary budgets for the implementation of forest management activities written in the PAF as planned. As such, problems with the financial aspects of the Project were confirmed. The performance of some of the forest management roles was also confirmed to be incomplete, as sufficient budgets for implementing the activities were not secured. Under these circumstances, the sustainability of the project expected effect is rated as fair.

In light of the above, this Project is evaluated as satisfactory.

### **4.2 Recommendations**

#### 4.2.1 Recommendations to the Implementing Agency

##### < Recommendations to MEDD >

###### Timely approval of the PAF at the national level

It was confirmed from the interviews with the implementing agency that the approval process for the PAF had been officially discussed within MEDD from 2015 onward. Now that three years have passed since the project completion, the finalization of the approval process of PAF and the approval of PAF are required as early as possible at the national level. It is confirmed as of the time of the ex-post evaluation that the approval of the PAF at the national level has been delayed by a lack of an official approval process set up within MEDD. This lack of official approval has weakened the legal obligations to implement the GGF activities or set up unit prices for forest products in some of the four targeted CFs. It has also been confirmed that the implementation of activities based on the PAF could not be encouraged even though some GGFs implemented forest management activities. From the above, MEDD needs to set up an official approval process for the PAF in the legal department by March 2017, and then, MEDD should encourage PAFs to be approved promptly at the national level according to the process established.

##### < Recommendations to DREDD-Cascades and DPEDD-Comoe >

###### Formulation of the Forest Management Plan (2017-2021)

The current Forest Management Plan is valid from 2012 to 2016. The plan therefore needs to be formulated at some point in 2016 for the next targeted period of 2017 - 2021. The formulated plan needs to conform to the actual situation, to reflect the issues confirmed under the current Forest Management Plan, and to bring about improvements such as the setting of pricing rules for forest products. In addition, the executive board members of the GGF/UGGFs need to be involved in the work for formulation of the Forest Management Plan as necessary.

###### Securing the budgets for forest management

In securing the budgets for the implementation of participatory forest management, although plans for securing forest management budgets were mentioned in the PAF, the amount of planned savings has not reached the target values due to less income from selling forest products, than expected. As a result of this shortfall, there has been insufficient money to secure and save the budgets necessary for forest management such as the Forest Management Fund which would be used in the future to cover infrastructure maintenance and the monitoring costs for forest officers.

One countermeasure the GGF/UGGFs could take to overcome this challenge would be to discuss their ongoing forest management activities with the forest administrative agencies (regional, provincial, and departmental levels) and evaluate which activities can be more productive and profitable in the future. They could also evaluate which activities are to be

maintained and which are to be expanded. It is expected that they will be able to increase sales by focusing on some of these identified profitable activities to be expanded. The accountants for each GGF, meanwhile, were unable to comprehend the respective forest management activities, and clear account management based on the PAF has been lacking. Therefore, each activity member needs to work closely with its accountant. This enables GGFs to consider which activities need to be focused and improved upon. The forest administrative agencies are required to implement this by March 2017 and clarify the direction of their activities.

#### 4.2.2. Recommendation to JICA

It is recommended that JICA perform a monthly follow-up with the implementing agency on the process of approval of the PAF at the national level and on the update of the Forest Management Plan. If progress slows or concerns arise, JICA needs to discuss the situation with the persons connected with the PAF approval process and to follow up to enable a smooth approval.

#### 4.3 Lessons Learned

##### Involving local people in the formulation of the Forest Management Plan

Although the GGF/UGGFs implement the forest management activities based on the Forest Management Plan, a big gap between the estimated sales in the Forest Management Plan and the actual sales from the forest management activities of the GGF/UGGFs was confirmed. Sales of the GGF/UGGFs have been much lower than estimated since the project completion. If a portion of profits will be distributed to GGF/UGGFs, financial concerns, such as the GGF/UGGFs not securing funds for the Forest Maintenance Fund to cover the forest maintenance and monitoring costs of the forestry officers, may arise. There are also concerns over future financing. One of the reasons for the shortfall of sales, confirmed after the project completion, is limited access to the market in order to sell forestry products. Considering the big gap between the estimated sales in the Forest Management Plan and the actual sales from the forest management activities of the GGF/UGGFs, it appears likely, in retrospect, that the income estimates were off target.

Circumstances like this suggest that the local people should be more actively involved in the planning of the Forest Management Plan in order to reflect their opinions from actual experience such as the operational issues during the implementation of forest management activities based on the PAF. Developing a plan for putting the capital to work towards its appropriate functions is also important. Likewise, companies in project target areas and in surrounding areas should be involved in the search for new sales channels for forestry products and potential collaboration from the time of project implementation.

##### Smooth communication with local people in the participatory project

After the project completion, facilitators to support the preparation of training and the work of formulating the PAF were confirmed to be necessary for the smooth implementation of the project activities and the establishment of good relations with the Project and GGF/UGGFs. Considering the design of the project, facilitators to directly support the GGF/UGGFs were inevitable and should have been included as an input item for the Project at the ex-ante evaluation. When formulating and implementing similar participatory forest management projects in the future, it will be important to elaborate the design and sufficiently examine necessary inputs, including facilitators.

#### Securing a budget which covers all expenditure necessary to carry out activities

The actual project cost exceeded the planned project cost due to the following two reasons, in addition to the employment of additional facilitators mentioned above. First, the clarification of forest zoning, which was the base for forest management activities, was set as one of the indicators for the project purpose. The cost related to this, however, was not actually secured in the project budget, nor did the project plan mention any person who would share this cost. It was assumed to be difficult, at the time of the project planning, to allocate an accurate budget under the project items, given that the clarification of the zoning for the activities was itself a project activity. This necessary cost, however, should have been at least estimated based on the information gained from the implementing agencies and etc. The need to construct warehouses for equipment and materials was confirmed as another reason, and the construction cost for this was added. As of the time of the project planning, the management and storage of equipment examined (i.e., who had the administrative responsibility of where and what to store) are assumed to be inefficient. When formulating similar projects in the future, it will be necessary to elaborate the activities of the project at the project sites and re-examine necessary items for inputs, with reference to the budget items and lessons learned from similar projects in the past. It is also important that any inputs of project cost which can be approximately estimated during the project planning need to be included in the project budget, or be agreed upon to share with the partner country.

#### Appropriate setting of the outputs, project purpose, overall goal, and indicators

Ambiguous descriptions have been observed in the project purpose, overall goal, and indicators.

- (1) There are overlaps between the project purpose and overall goal. Both purport the following as an aim: “Activities are implemented by the local people through the GGFs and UGGFs aiming for sustainable forest management (the word “sustainable” was removed from the project purpose at the ex-post evaluation)”.
- (2) There is a similarity between the Indicator 2 for the project purpose and the Indicator 1 for the overall goal (The only difference is that the latter includes the word “sustainable” while the former does not). These are not quantitative indicators and also unclear if they target “the number of GGF/UGGFs that are continuing their activities” or “the number of activities that

are continuously being implemented” (Multiple aspects were therefore analyzed in the ex-post evaluation to assess the level at which each GGF would continue its activities).

- (3) In order to analyze the achievement of the Indicator 1 for the overall goal, “forest management activities are implemented according to the PAF”, it was unclear if the indicator would be sufficient for the forest management activities so long as they were “following the PAF” or so long as the indicator should both “follow the PAF” and “achieve the target based on the income and expenditure plan described in the PAF” (The former interpretation was applied to the ex-post evaluation).
- (4) As the Indicator 1 was a duplicate of the overall goal itself, the Indicator 2 of the overall goal, which shows an increased number of GGF members, was therefore added.

A number of issues raised, such as a duplication of the target and indicators and the lack of indicators, made it difficult to evaluate this particular project. In order to clarify the aims of the Project, when planning the Project and revising the PDM, the outputs, project purposes, overall goals need to be checked whether they are clearly defined, and also whether indicators for each are properly set.

Attachment - 1

Table A Project outputs at the project completion and achievement level of output indicators

Output	Indicator	Achievement																					
Output 1: The national and local forest administrative agencies have an enhanced capacity to support the local people in implementing participatory forest management <u>Status of achievement:</u> <u>Achieved</u>	Indicator 1: Forest officers connected with the Project participate in training for participatory forest management four times at the regional level and 11 times at the national level and cooperate with local persons connected with the Project <sup>34</sup> .	<u>Status of achievement : Achieved</u> As a result of the training conducted four times at the regional level and 11 times at the national level, the cooperative relationship between forest administrative agencies and the Project was improved. In addition, the forest officers who participated in the training not only served as lecturers for forest management technical training for the GGFs, but also widened their knowledge about forest management. These experiences helped them become confident as forest officers.																					
Output 2: The GGF/UGGFs have an enhanced capacity in sustainable forest management in the target villages <u>Status of achievement:</u> <u>Achieved</u>	Indicator 1 : 27 GGFs and 4 UGGFs are newly established or re-activated.	<u>Status of achievement : Achieved</u> The existing 13 GGFs were re-activated and 14 GGFs were newly established (27 GGFs in total). Two existing UGGFs were re-activated and two UGGFs were newly established (4 UGGFs in total).																					
	Indicator 2 : GGF/UGGFs use techniques learned through the training and commence the forest management activities.	<u>Status of achievement : Achieved</u> All GGF/UGGFs started the activities using techniques learned through the project training. Table A.1 shows the techniques learned through the training and actually used by the GGF/UGGFs.																					
<p>Table A.1 Techniques learned by the GGF/UGGFs through the training and techniques applied by the GGF/UGGFs</p> <table border="1"> <thead> <tr> <th>Name of activities /training</th> <th>Techniques learned through the training</th> <th>Applied techniques</th> </tr> </thead> <tbody> <tr> <td>Clearing space for fire protection</td> <td>Management of clearing space for fire protection</td> <td>Same as in the left column</td> </tr> <tr> <td>Honey production</td> <td>Set of beehives, collecting/harvesting honey</td> <td>Same as in the left column</td> </tr> <tr> <td>Shea butter production</td> <td>The fruit harvest, management of post-harvest (milling, boiling and filtration, etc.)</td> <td>Same as in the left column</td> </tr> <tr> <td>Sumbala production</td> <td>Harvest to processing (removing hulls, cleaning, storage, boiling, steaming and fermenting)</td> <td>Same as in the left column</td> </tr> <tr> <td>Saba syrup production</td> <td>Method for collecting mackerel, drying processing and method for processing</td> <td>Same as in the left column</td> </tr> <tr> <td>Seedling production</td> <td>Nursery management at nurseries, methods for procuring seeds</td> <td>Same as in the left column</td> </tr> </tbody> </table>			Name of activities /training	Techniques learned through the training	Applied techniques	Clearing space for fire protection	Management of clearing space for fire protection	Same as in the left column	Honey production	Set of beehives, collecting/harvesting honey	Same as in the left column	Shea butter production	The fruit harvest, management of post-harvest (milling, boiling and filtration, etc.)	Same as in the left column	Sumbala production	Harvest to processing (removing hulls, cleaning, storage, boiling, steaming and fermenting)	Same as in the left column	Saba syrup production	Method for collecting mackerel, drying processing and method for processing	Same as in the left column	Seedling production	Nursery management at nurseries, methods for procuring seeds	Same as in the left column
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<sup>34</sup> The local persons are GGFs.

Output	Indicator	Achievement	
	Afforestation	Afforestation techniques	Same as in the left column
	Utilization of medical plants	Collection and processing of medicinal plants (drying and storage)	Same as in the left column
	Logging	Logging technique	Same as in the left column
	Charcoal making	Collection of firewood, cutting method, and management of kettles	Same as in the left column
	Pasture grass production	Grazing, harvesting, and storage of dried plants	Same as in the left column
Output 3: The living conditions of the local people are improved <u>Status of achievement:</u> <u>Mostly achieved</u>	Indicator 1 : The GGFs in the target CFs commence income-generating activities using timber and non-timber forest products.	<u>Status of achievement : Achieved</u> The GGFs implemented the income-generating activities <sup>35</sup> with the use of timber and non-timber forest products. Their income was improved as a result.	
	Indicator 2 : The GGFs reinvest for the purchase of equipment and materials necessary for project implementation.	<u>Status of achievement : Achieved</u> All of the GGFs pooled parts of their income from income-generating activities and secured running costs for the forest management activities. Twelve to 18 of the 27 GGFs reinvested for the purchase of equipment and materials during the project <sup>36</sup> .	
Output 4: The plan d'aménagement et de gestion forestière (PAF) in the four target CFs is formulated and put into practice <u>Status of achievement:</u> <u>achieved</u>	Indicator 1 : A PAF is formulated in each target CF; four PAFs are formulated in total.	<u>Status of achievement : Achieved</u> A PAF was formulated in each target CF (four PAFs were formulated in total). However, the Japanese experts were evacuated from Burkina Faso temporarily in the 4 <sup>th</sup> year of the project. This precluded efficient consultations when the PAFs were in the finalization stages.	
	Indicator 2 : The Guide on the methodology for forest development in the South-Sudan climate zone was prepared	<u>Status of achievement : Achieved</u> The work to prepare the <i>Guide on the methodology for forest development</i> in the South-Sudan climate zone was commenced in the 3 <sup>rd</sup> project year and completed in the 5 <sup>th</sup> project year.	
	Indicator 3 : At least eight types of the participatory and sustainable forest management practice manuals are prepared for the local people.	<u>Status of achievement : Achieved</u> The following five types of participatory and sustainable forest management practice manuals were prepared for the GGF/UGGFs by the Project. <ul style="list-style-type: none"> <li>• Technical manual for the quality improvement of sumbala production quality</li> <li>• Technical manual on grazing management</li> <li>• Technical manual for the quality improvement of shea butter quality</li> </ul>	

<sup>35</sup> There were 11 income-generating activities: honey production, seedling production, logging, shea butter production, medical plant production, charcoal-making, wildfire protection, pasture grass management, forest thinning, sumbala production, and saba syrup production.

<sup>36</sup> The widely variable estimate in the number of GGF, from 12 to 18, was due to a lack of detailed information from each GGF. The extent to which the GGFs duplicated their reinvestment in the activities could not be determined.

Output	Indicator	Achievement
		<ul style="list-style-type: none"> <li>• Technical manual on the utilization of medical plants</li> <li>• Manual for the improvement of organization capacity</li> </ul> <p>Three types of manual (charcoal making, seedling production, and wildfire management) were not prepared because the three existing manuals were adopted.</p>
	Indicator 4 : The GGF/UGGFs continuously learn at least four types of techniques for forest management activities and implement the activities based on the PAF.	<p><u>Status of achievement : Achieved</u></p> <p>It is confirmed that all GGFs learned the techniques to perform more than eight out of eleven types of income-generating activities and implemented those activities based on the PAF.</p>
Output 5: The cooperative relationship between the national/local administrative agencies and forest administrative agencies is strengthened to implement sustainable forest management	Indicator 1 : Consultative meetings between local stakeholders and persons in ministries concerned are held three times per year.	<p><u>Status of achievement : Achieved</u></p> <p>Although the consultative meetings were actually held twice a year, less frequently than planned, the GGFs reported their own activities and the participants exchanged opinions. Mutual understanding on forest management activities and cooperative relationships among participants were therefore promoted. It was also confirmed that the GGF/UGGFs had overcome their earlier fears regarding their forest officers.</p>
	Indicator 2 : The partnership agreement between the Project and regional office is concluded.	<p><u>Status of achievement : Achieved</u></p> <p>Regional directorate desired to sign the partnership agreement with the Project with the aim of obtaining financial supports when they participate in project activities. However, the amount of support shown in the proposed agreement by the Project was smaller than the regional directorate expected. The regional directorate therefore determined that there was no advantage in executing the agreement and ultimately turned it down. Hence, no cooperation agreement was signed.</p>
	Indicator 3 : Cooperative relationships are established between the Project and local private companies.	<p><u>Status of achievement : Achieved</u></p> <p>Cooperative relationships between the UGGFs and three private companies/one association<sup>37</sup> were established. The UGGFs commenced the sales of shea butter, medical plants, etc. While no cooperation has yet commenced between the GGFs and local private companies, a relationship among them was newly built and an income source for the GGFs was generated.</p>

<sup>37</sup> The three private companies are a Japanese company limited called A-Danse and two private local companies called Phytofla Laboratory and Bomba Techno. The association is a civic association called Rakieta Association.

Table B The number of GGFs in each activity implemented during the project period, at the project completion, and at the ex-post evaluation

Name of activities	During the project period (A)	At the project completion (B)		At the ex-post evaluation (C)	
	Number of GGFs	Number of GGFs	Persistency rate (B) / (A)	Number of GGFs	Persistency rate (C) / (B)
1. Clearing space for fire protection	27	27	100%	27	100%
2. Honey production	24	26	108%	27	104%
3. Shea butter production	24	24	100%	23	96%
4. Sumbala production	9	10	111%	9	90%
5. Saba syrup production	10	11	110%	3	27%
6. Seedling production	27	27	100%	27	100%
7. Afforestation	27	27	100%	26	96%
8. Utilization of medical plants	27	27	100%	24	89%
9. Logging	27	18	67%	12	67%
10. Charcoal making	24	18	75%	7	39%
11. Pasture grass management	25	20	80%	14	70%
Average rate	22.8	21.4	94%	18.1	85%

(Source: Beneficiary Survey, 27 GGFs targeted)

Table C Forest Development Goals of PAF formulated for each CF

Toumoussénni CF, Gouandougou CF and Kongoko CF	<ul style="list-style-type: none"> <li>• Conservation of biodiversity<sup>38</sup></li> <li>• Provision of forest products to Banfora and Bobo Dioulasso, where consumption of commercial goods is high.</li> <li>• Provision of opportunities for income-generating activities to the local people</li> <li>• Implementation of reliable management in the area of natural resource management</li> </ul>
Bounouna CF (Set by each zone)	<p>&lt; Production zone&gt;</p> <ul style="list-style-type: none"> <li>• The productive capacity of firewood, bar wood, timber, and non-timber forest products is improved to secure/guarantee supplies to the high consumption areas such as Banfora and Bobo Dioulasso</li> <li>• Income is generated by making the best possible use of non-timber forest products</li> </ul> <p>&lt;Recreation zone&gt;</p> <ul style="list-style-type: none"> <li>• Recreational space is installed in the CF for environmental education and entertainment</li> <li>• Employment opportunities are provided for the local people</li> <li>• Conservation of biodiversity is ensured</li> </ul>

(Source: Documents provided by JICA)

<sup>38</sup> Forest management is implemented without disturbing the balance of the ecosystem in the CFs (for example, to protect, etc. the home range of the vegetation and animals without overhunting).

Table D Details of the beneficiary survey

No	UGGF	(1) No. of UGGF executive board members	GGF	(2) No. of GGF executive board members	(3) No. of GGF members		The total number of members	
					Men	Women	Men	Women
1	Bounouna	1	Bounouna	1	2	10	4	45
2			Labora S	1	4	8	6	12
3			Labora N	1	3	9	7	30
			Total		9	27	17	87
4	Toumous enni	1	Toumousenni Male	1	6		25	
5			Toumousenni Female	1		6		56
6			Soubaka Male	1	5		15	
7			Soubaka Female	1		5		30
8			Djongolo Male	1	5		18	
9			Djongolo Female	1		5		31
10			Tagnana Male	1	6		35	
11			Tagnana Female	1		6		110
			Total		22	22	93	227
12			Gouando ougou	1	Gouandougou	1	4	8
13	Dakie	1			4	8	13	21
14	Gouara	1			4	8	46	115
15	Ouratenga	1			4	8	10	20
16	Tonga	1			4	8	20	30
17	Wenga	1			5	6	21	18
18	Bougoussou	1			4	8	15	25
19	Dandougou	1			4	8	38	70
	Total				33	62	176	339
20	Kongko	1			Kassande	1	5	7
21			Fougangoue	1	6	6	20	25
22			Pima	1	6	6	50	54
23			Djanga	1	6	6	50	35
24			Bade	1	6	6	75	90
25			Faradjan	1	7	4	50	35
26			Kadio	1	5	7	40	65
27			Banakoro	1	5	7	21	40
			Total		46	49	335	391
To tal		4		27	110	160	621	1,044
					270		1,665	

\* The beneficiary survey, as mentioned in Footnote 18, is comprised of all interviews with (1) UGGF executive board members, (2) GGF executive board members, and (3) GGF members (selected at random).