Field visit report Indonesia
RSB Smallholder Standard Systems

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Contents

1. Background and Rationale 3
   1.1 Objective 3
   1.2 The project 4
   1.3 Organisation 5

2. Findings 5
   2.1 Smallholder Organization 5
   2.2 Management Capacities 6
   2.3 Sustainability impacts of smallholders 7
   2.4 Reaching smallholders 11

3. Conclusions 12

List of Figures

Figure 1 - Map of KPS Perintis.................................................................4
Figure 2 - Discussion with management and farmers of cooperative ...........5
Figure 3 - Organizational structure of cooperative....................................6
Figure 4 - Folders in the secretariat of the cooperative.............................7
Figure 5 - Worker harvesting palm oil .....................................................8
Figure 6 – Another (replanted) plantation in West Pasaman ........................9
Figure 7 - Farmer and worker in plantation ..............................................11
Figure 8 - Truck with fresh fruit bunches ..............................................12
1. **Background and Rationale**

The Roundtable on Sustainable Biomaterials is an international, multi-stakeholder initiative of companies, non-governmental organizations, experts, governments, and inter-governmental agencies with the goal to ensure the sustainable production of biofuels. Amongst its members are IATA, Airbus, Shell, Neste Oil, IUCN and IFPRI, to name only a few. The RSB was launched by the Swiss Federal Institute for Technology (EPFL) and became an independent organisation in January 2013, while EPFL continues to support its work through a number of projects. The RSB developed a third party certification system for the production of sustainable biofuels, which is operational since 2011.

Recognizing the necessity to adjust its certification system to the specific needs of small farmers and to promote their participation in sustainable biofuels production, EPFL, with the support from the Swiss Development Cooperation Agency, is currently in the process of developing specific provisions for smallholders to propose an adaptation of some parts of the RSB system. The development of smallholder provisions for the EPFL is conducted by Aidenvironment, an independent consultancy addressing sustainability issues, based in the Netherlands and with a regional office in Bogor, Indonesia. Aidenvironment has vast experience in developing and evaluating sustainability standards as well as working with smallholder producers of various tropical commodities. The project is implemented in close cooperation with the RSB Secretariat and RSB Services.

To ensure the practicability of the RSB smallholder provisions from the beginning, a number of field visits to smallholder producers with different operational backgrounds are being conducted. These field visits are planned to cover three continents and the main crops currently used for biofuel production. From April 28 till May 1, 2013 Jonas Dallinger, Sri Ranti (Aidenvironment) and Anne-Sophie Dörnbrack (EPFL) visited a smallholder group part of a plasma scheme in Indonesia, the global leader in palm oil production.

It was expected that an Indonesian plasma scheme would provide the perspective of professionally managed farmer group with possibly high capacities to meet the RSB sustainability and group management requirements. As oil palm plasma schemes in Indonesia are part of a government or private sector development, they can potentially be associated with larger scale impacts than generally anticipated for smallholder farmers.

1.1 **Objective**

In developing the smallholder provisions, a set of general assumptions have been made. As the nature of different smallholders and their organizational structure can differ significantly, in this specific case some of these assumptions are to be tested on the high end, meaning with potentially the best performing type of smallholder group. Other field visits will look at different organizational structures. Some of the questions to be answered through the field study are outlined below.

Smallholder organizations
- Do the assumptions we make in developing the smallholder provisions fit the context of an Indonesian smallholder oil palm scheme?
- Should such schemes be given access to the smallholder certification or not?
- Is our understanding of a group in line with what we find?
- What criteria should be met by smallholder groups/organizations to qualify for using the RSB smallholder provisions?
Management capacities of smallholders

- How do the requirements of the standards fit with the capacities of the smallholders and their organization?
- What is the management capacity of the group regarding Internal Control System (ICS), chain of custody monitoring, data collection?
- Does any support structure and/or agricultural extension support exist to reach out to members?

Sustainability impacts of smallholders

- Looking at the operations of the smallholder scheme, are the draft RSB smallholder provisions adequate to ensure sustainable feedstock production?
- How are plasma schemes developed and managed with regards to sustainable practices?

Reaching smallholders

- What conditions and incentives need to be in place to make RSB certification interesting for smallholders?

1.2 The project

The field visit was conducted at the KPS (Koperasi Petani Sawit) Perintis Pirbun Ophir (KPS Perintis) which is located in the West Pasaman District in the Indonesian province of West Sumatera. The KPS Perintis is one of five cooperatives who have been established in the area as part of the Nucleus Estate Smallholder (NES) Program of the Indonesian government early in the 1980s. The Ophir project was supported by the German Development Cooperation and is unique due to its participatory character when compared to other NES schemes. In this approach, farmers are given more responsibilities and an active role in the organization of the scheme. Almost 30 years after the start of the project, it is widely recognized as one of the few successful smallholder projects in Indonesia. Originally implemented as a plasma scheme providing feedstock the state owned company PTPN 6, the cooperative Perintis is now independent and free to negotiate with other potential buyers. They are currently supplying a medium sized private oil mill.

591 families are members of the KPS Perintis and the overall area under their management amounts to 1280 hectare. The farmers are organized in 26 farmer groups (kelompok) with each 16 to 28 families as members, with an initial ownership of 2 ha at the start of the project. New members can’t be accepted as the cooperative is limited to the land that has been allocated to them. To become part of the group, one would have to buy the plot of a group member. Each group has an elected group leader as well as 2 staffs to assist. The group leader holds responsibility for the effective management of the farmer group, implementation of production and harvesting standards as well as the monthly progress meetings and a yearly report. Transportation and marketing of the harvest to the customer is organized by the cooperative. The weekly harvest of one kelompok is sold jointly and the revenues are shared between the members.

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1 Plasma refers to the land that is allocated to smallholders as part of the supply base of an oil mill. Different oil palm development models have applied in Indonesia over the last decade which require companies to develop a certain share of the land to be used by smallholder farmers. Often those schemes were combined with transmigration and retirement programs.
of the kelompok in relation to their land size, which in general is 2ha for each member. Payments to the members are made on a monthly basis, while a “fee” for fertilizer, transportation, etc. is deducted from the payment. Although this means that individual performance in the management of the farm does not pay back directly, the group dynamics encourage implementation of good practices, while bad performance on individual plots can get penalized. The farmer group decides whether sanctions should be applied.

1.3 Organisation

To discuss the draft RSB smallholder standards and the questions outlined above, a meeting with the management of the cooperative Perintis as well as a number of farmer group leaders and a retired former general manager have been conducted on the first day. The second day was utilized to observe the actual work in the field and talk to farmers, farmer group leaders as well as farm workers. On the third day, discussions were held with Dr. Afrizal from the social and political studies faculty of Andalas University in Padang, West Sumatera as well as with Daulat, a local civil society organization working on economic empowerment, and the West Sumatera branch of Friends of the Earth Indonesia.

2. Findings

The following sections contain the most relevant findings of the field visit.

2.1 Smallholder Organization

The field visit provided valuable insights on an oil palm plasma scheme, a typical form of smallholder organization in Indonesia. The most distinct aspect to be considered for such a scheme is the fact that the set-up of the organization and the development of the land is done by private or government companies. The general understanding of smallholder organizations as independent, self-organized groups with limited large scale impacts could be misleading in such a case where large areas of land are cleared in a short period of time to develop plantations which than are handed over to farmers for management. This holds the potential for the same adverse environmental and social impacts generally associated with large scale palm oil plantations.

The cooperative Perintis and its members however, after taking over the management of the land, did not expand the planted area and do not have any plans to do so in the location. External sources reported that the cooperative Perintis acquired land in the Jambi province, but this could not be specified or confirmed. Membership in the cooperative is voluntary and procedures exist to leave the organization. The leadership is elected by the members on a regular basis and members are actively involved in the running of the organization. Management documents and internal procedures are written in a cooperative charta, which was developed with contribution from the members and are
regularly reviewed. Its content comprises: Vision, Mission, Ideology, Services Provided, Rules of Membership, Rights and Obligations, Type of Meetings, Mechanism of Annual Meeting, Management Obligations, Duties and Authorities and Monitoring amongst others.

Apart from the regular meeting of the group leader with the cooperative, there is an annual meeting of the entire membership and special meetings in case of disputes or other urgent issues. Most organizational issues are discussed in the annual meetings, e.g. costs, use of fertilizers, decision of oil mill. The cooperative also has a working complaint mechanism system.

2.2 Management Capacities

The cooperative Perintis shows that smallholder organizations in developing countries can be managed professionally and the management requirements of the current smallholder provisions are not completely out of reach for smallholder organizations. The cooperative is responsible for marketing, administration, purchase of inputs (like fertilizer), financial reporting, transport of fresh fruit bunches, and provides technical assistance and extension services to its members. They also run a cooperative shop with farm inputs and consumer goods. They have regular meetings with the head of the farmer group to assess their performance, improve their management and take corrective actions were needed. The farmer group also has regular internal meetings.

However, the cooperative management only focuses on their farming business and does not include any consideration of social and environmental impacts and management. Also, the cooperative does not have any formal risk management system in place as required by the RSB. Incorporating those issues in the management of the cooperative would require intensive capacity building and additional staff.

A chain of custody control system could relatively easily be implemented by the cooperative management, as they are using a closed and joint marketing, which means that their sales is limited to the produce of their members, who sell as one kelompok through the cooperative. There is a fixed schedule for the pick-up and transport of Fresh Fruit Bunches (FBB) from the plots, which could ensure traceability. Documentation of sales is available and records are maintained. For this relatively simple and easy to control marketing model, the implementation of the draft chain of custody requirements seems realistic.

A simple internal control mechanism does exist to ensure the implementation of the production and harvesting standard of the group. Extending this to control further standard requirements would require additional knowledge and capacities by the cooperative. The documentation requirements and data collection for the internal control system would also mean additional work. Some basic data is currently collected by the cooperative (yields, sales, fertilizer usage) and published annually. In addition, there is an annual external financial audit.
The organizational structure where the overall group / cooperative is organized in small sub-groups (kelompoks) seems to be a good management model which reduces the demand on a centralized management. Combined with the central extension services (three staff), this management model could be a good basis for the capacity building requirements of the current draft standard. The head of the cooperative perceives the RSB standard requirements as feasible for the cooperative Perintis. However, he also acknowledges the need to increase knowledge at the farmer and management level, which would require time and efforts. Applying the standard would also have to show clear benefits for the members to get their buy in. When investments are needed to ensure compliance (e.g. proper use and storage of chemicals), the cooperative would probably have to provide financial support unless the farmers see a clear economic benefit.

2.3 Sustainability impacts of smallholders

The RSB requirements in the Principles and Criteria document have been discussed with the cooperative management and partly observed in the field.

Legality
The cooperative is established under cooperative law and the relevant national laws are followed by the cooperative management.

Planning
The cooperative has a yearly workplan, which is evaluated and adjusted in monthly meetings together with the leaders of the kelompok. Results from that meeting are shared and discussed by each leader of a kelompok with the farmers. This solely considers the core activities of the cooperative, which is the production and marketing of FFB. The cooperative management considers environmental impacts as a government responsibility. The kelompok also conducts social activities where non-members can participate. The cooperative management raised concerns about the long-term impacts of chemical fertilizer use on the soil fertility. Where such impacts are seen as relevant, the cooperative would include it in their planning. They also raised interest in monitoring the quality of the drinking water, but they lack the expertise and support to do so. They have a clear and professional planning for replanting (e.g. purchase of certified seedlings, acquiring a bank loan), however they feel that they lack the necessary technical knowledge and would hope for technical support.

The establishment of the plantation, which took place 30 years ago, was out of the responsibility of the cooperative and farmer members at that time as well as the nowadays required social and environmental impact assessments in accordance with Indonesian law.

Green House Gas
Some data is collected and could be used for calculating the greenhouse gas emissions. This includes fertilizer usage and yields.
Human and Labor Rights

The management of farm workers is out of the responsibility of the cooperative or the kelompok. It is organized by the individual farmers themselves. They mostly hire family members of cooperative members to do the farm work. All farm work is done on an informal basis, without any written contracts, even though workers have been employed by cooperative members for a long time (e.g. 20 years). No written contracts exist and payment is not documented. Payments are negotiated orally and done on a monthly basis. Interviewed workers did not see a need for written contracts and are in general content about their working conditions, as the salary is relatively good in comparison to similar work in the area (according to one worker, he receives 2 million IDR per month, while the minimum wage is 1,3 million).

One worker needs 2 hours to maintain and harvest a plot of 2 ha. As the workers manage their time on their own, there is no record keeping about working hours or free days. According to one worker, he does 4-5 plots a day and works 4 days a week.

The implementation of occupational health and safety requirements would be the main issue to address, for harvesting as well as use and storage of pesticides. This would also require raising the awareness of the potential risks, as interviewed workers often prefer comfortable clothing for work rather than protective equipment. In the cases of accidents, the kelompok has a social fund from which a limited amount of hospital costs would be paid for. This fund can also be accessed to cover the cost for a funeral. The social fund of the cooperative, to which members contribute every month, can only be accessed by members directly, not by workers who are under the responsibility of the members rather than the cooperative.

Provision of food and water is organized by the workers themselves, something which they consider normal. Workers did not see any need to get organized and strengthen their bargaining power towards their employers. In principal, they would be free to do so. Currently, there are no trainings for workers, as most of them have been doing their job for a long time. In the early stages of the plantation, when experience was limited, workers would be instructed on how to perform their job in accordance with the farm standard of the group.

The use of pesticides is under the control of the individual farm members, while the cooperative only provides guidelines and 3 types of recommended pesticide products at the cooperative shop. The farmers can buy through the cooperative shop or from outside. To ensure the safe and proper use and storage of pesticides, awareness raising would be an important first step. The group management recognized that it cannot force its members to adopt any specific practices, but that it would be necessary to convince the members of the benefits of such practices. This is also how their farm management standard is implemented.
In general, it seems that it would not be easy for farmers to comply with the current draft principle 4, but manageable if there are incentives of being compliant. It has to be taken into consideration that the situation of the farmers themselves may not necessarily allow them to provide a permanent contract or better working conditions to the workers.

**Poverty**

Oil palm has brought considerable wealth to the region, which used to be one of the poorest areas in Indonesia. Ongoing fast and uncontrolled expansion of oil palm by independent smallholders in the region supports shows that oil palm cultivation is considered an attractive livelihood activity. The professional management of the land within the cooperative Perentis allows high returns from oil palm farming for the land owners. Interviews have shown that labor in the sector is paying relatively well and above national minimum wage.

**Food Security**

Food security is considered to be under the responsibility of the government and part of the national land use planning. Interviewed stakeholders from civil society considered food security and the conversion of agricultural land (e.g. rice paddies) for the production of commodities (oil palm) a serious concern in the region. As the cooperative has been managing their land for 3 decades and does not expand its area, this is not considered an issue.

**Conservation**

The farmers do not perceive any negative impacts and the land has been developed a long time ago, so it is difficult to assess any impacts. Overall conservation is seen as a government responsibility. Intrusion into protected areas by smallholders is however happening and could in principle also be caused by members of the group when they establish additional oil palm farms, outside of the cooperative management (even if they would not be allowed to sell these FFB to the cooperative). This shows that the cooperative cannot control the practice of the farmer beyond the land which is part under the cooperative management. The cooperative does not allow the harvested product from external plots into their chain of custody, mainly because of quality concerns. The example of the cooperative Perintis shows that such a model of group organization is favorable to control the implemented practices of members and ensure that only sustainably produced feedstock enters the supply chain.

A map like the one required in the draft standard is not available and under the given conditions the group does not see any need for that. Considering that the group is established for a long time and not expanding the need of such a map could be questioned. Here the question arises in how far the cooperative can be held responsible for the practice of its members beyond the official scope of the cooperative management which is limited to the land that has been allocated to the farmers under the plasma scheme. Interviews revealed that raising awareness on the importance of nature conservation and ecological services would be important even at management level. Buffer zones have not been established on the land and doing this after replanting would negatively affect some group members. Considering that workers and farmers use the water of streams in the plantation for consumption, awareness raising on the risk and the benefits of establishing buffer zones are an important point to
make. The current standard draft does not explicitly require awareness raising on the importance of nature conservation and ecosystem services.

**Soil**

Soil health is a clear concern of the farmers, as it directly affects their long-term returns from the farms. Knowledge on good practices is appreciated and needed. The group also reported that taking the desired measures (e.g. application of empty fruit bunches\(^2\)) is not always possible due to limited access to technology or resources. In addition, a clear cost-benefit-analysis would be an important tool to ensure the viability of soil improvement measures as logistic costs can be disproportionally high for smallholders. Where possible, measures to improve the soil are already taken by the cooperative members and good practice is promoted in the farm management standard of the group (e.g. no layer spraying).

**Water**

Irrigation is not used. Water availability is not seen as an issue in the region due to high rainfall. Measures to prevent run-off of fertilizer and herbicides can be considered inadequate, as no buffer zones are established. This is especially of concern as the water courses in the plantation are used for consumption without any pre-treatment. Again, awareness raising and capacity building on the management level as well as the farmer group level would be a first important step in ensuring that good practices are applied.

**Air**

This principle is related to the impacts on air quality that could arise from the burning of vegetation or dead palms during plantation establishment and replanting. The cooperative management is well aware that burning is prohibited and not the best method for replanting. Burning for smallholder oil palm plantations was clearly visible in the area, outside of the land of the cooperative and for less organized and educated smallholder groups awareness raising and capacity building on alternative techniques would be needed.

Empty herbicide canisters are burned in the field which would not be allowed in the current draft. The implementation of good practices could be relatively easy in a well-organized group like the cooperative Perintis, if there is an understanding of the benefits.

**Technology**

Good planting material is used and sought for replanting as well. The cooperative management is well aware of the benefits of using certified seedlings. Sales of uncertified seedlings in village nurseries are visible in the area outside of the cooperative. Many smallholders prefer those seedlings due to much lower prices and a limited understanding of the risk associated with uncertified seedlings.

Chemical usage is only partially controlled by the cooperative through the selling of registered chemicals in their cooperative store. Storage has not been observed, but it is most probably insufficient to reduce potential risks. The requirements in the standard regarding the allowed chemicals would challenge the cooperative in finding alternatives and convince their members of the benefits of using those alternatives, especially in the case where those are cheaper than the currently used chemicals. Storage and disposal are in the responsibility of the individual farm and it is doubtful that good practice is implemented. For disposal, burning is used. The farmers did not see any problem with doing so which shows that they are not aware of the potential risks.

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\(^2\) Applying empty oil palm fruit bunches, a by-product of palm oil production from FFB, on the field is considered a good practice to increase soil organic matter, water holding capacity and replacing a share of chemical fertilizer.
Land Rights

The land of the group members has been developed by third parties and it is not clear whether at that point of time land use right had been respected. As no expansion is taking place, there are no further issues regarding land use rights. The cooperative has the legal land titles as required. Conflicts between the cooperative Perintis and the local community do not exist according to the cooperative management. External parties reported severe conflicts between local communities and companies. Conflicts can also arise between companies and smallholders in a plasma scheme, e.g. when the companies do not fulfill their promises, as agreed before the land is exchanged for oil palm development by the communities. Conflicts could also arise between group management and individual members. There are clear procedures for dispute settlement in the cooperative Perintis, but external sources report that those issues are not as well managed in other cooperatives.

Overall, the environmental and social impacts of the cooperative Perintis are considered to be limited at this stage, as land development has been done a long time ago, no expansion is taking place and a well-functioning management is in place. However, other, non-organized smallholders in the area are likely to adopt worse practices and have accumulated severe negative impacts, as reported by external sources. This is due to a lack of ability of the government to control the large number of smallholders. They could clear land, plant without land title and on unsuitable land, burn for clearing, plant on river banks and in national parks. The challenge is to reach out to those smallholders and make sure they comply with current government regulations. For compliance with any standard, the challenge would be similar and the organization of smallholders would be the first necessary step. They would need support services to get acquainted to good practices, raise their awareness and build their knowledge. For ensuring compliance with laws and regulations as well as standard requirements, market access is considered a very strong instrument.

2.4 Reaching smallholders

For a farmer group like the cooperative Perintis, it is considered feasible to implement the standard requirements, although it would require significant extra work and time to build up the required capacity. Economic benefits are considered by the group as the main criteria to assess whether complying with a standard should be taken into consideration. This is confirmed by external parties who mention market access as the most effective way to make smallholders change their practices. To convince the group management and especially the members of other, non-economic benefits of the standard would require intensive awareness raising and education. The whole concept of sustainability as contained in the RSB is little understood by the farmers and the senior management as is the approach of voluntary third-party certification.

Considering that the cooperative Perintis is one of the most advanced palm oil smallholder groups in Indonesia, it is obvious that for a broader implementation of the standard and to successfully reach out to a large number of smallholders, organizing them in groups would be a first step and precondition. This would allow an entry point to raise their awareness on the sustainability issues. Clear eco-

Figure 7 - Farmer and worker in plantation
onomic benefits or market pressure could ensure that capable groups implement the standard requirements.

From the field visit it also became apparent that external support and time are essential for a smallholder group to achieve compliance. The support could come from a local NGO, a committed company, an international organization or an external fund, but it is important that there is a trust basis between the supporting organization and the farmers.

3. Conclusions

The field visit shows that the current standard would be applicable to farmer groups similar to the cooperative Perintis. Implementation could lead to improvements mainly regarding health and safety of workers and the safe use, storage and disposal of chemicals as well as good practices to avoid run-off and to improve soil quality. Overall, the management capacities of the cooperative seem to be a good basis to incorporate the RSB requirements in the group management. The group received intensive capacity building during its establishment with support from the German Development Cooperation, which worked towards a very good standard of farm and organizational management. Significant further and long-term external support in the form of training and education of the group management would be required, as well as additional staff, to ensure that the RSB requirements are understood and implemented.

The perception of the cooperative management is that they are already implementing best practice and, although they would welcome an improvement of their management system, feel confident that they can meet customer requirements in the form of a standard. However, they clearly lack awareness on a number of the sustainability requirements of the RSB and the whole concept of voluntary third-party certification.

These findings support the idea of a phased-in approach, where not all standard requirements have to be implemented from the beginning. As it would be difficult for a group of small-scale farmer to work on achieving compliance with the Principles and Criteria before getting any benefit (including certification and higher prices), it should be considered to keep the entry level rather low and leave enough time to reach full compliance. Two years might be too short, especially if the group has little support (financial and/or for capacity building) from external organizations.

Consideration should also be given to where external support could come from. Encouraging the group to make the required additional efforts and investments does call for clear economic benefits. Working on increased demand for RSB certified feedstock from smallholders is of crucial importance for the economic viability of certification of smallholders.

The field visit has also shown that a large number of the RSB requirements are of little concern for the cooperative visited, because of its nature, the fact that is a long-established set-up and its devel-
development over the years. It is a long established group, which does not further expand its area and does not allow external feedstock to enter in the supply chain. It is clear that this is not at all the case for unorganized independent smallholders and many other forms of smallholder organization models in the oil palm production. For some requirements like conservation, a lack of awareness has been observed, which calls for the standard to put an even stronger focus on awareness raising on the benefits of sustainable practices which is often not present even on the management level.

Newly established plasma schemes would show a different picture than the cooperative Perintis, as during the establishment major environmental and social impacts can be expected. In Indonesia, this would however not be in the hand of the smallholder farmers or their organization, because responsibility is handed over to the smallholders from bigger companies or the government only after the crop is yielding. Besides, some of the Indonesian oil palm plasma schemes are under a strong central management, controlled by a company where the smallholders do not play an active role in farm management. For the definition of smallholders and groups eligible to use the RSB smallholder provisions, this could mean that an independent management of the group and participative structures recognizing its members rights and opinions, become smallholder group requirements. A cut-off date for the establishment of the plasma scheme could ensure that newly established plasma schemes do have to meet the same requirements as general operators / non-smallholders.

Interviewed partners also mentioned that the requirements are much too broad and would need to be adjusted to the specific local conditions and sustainability concerns in the form of a national or local interpretation. The standard should define very specific and practical requirements instead of the sometimes general formulations currently used.

The last important finding to be taken up is that the major impacts of smallholder groups can be expected to arise where they are not organized and controlled in any way by a central management or government body. The most important requirement to ensure more sustainable practices is therefore to ensure that smallholders get organized and establish internal structures and procedures. To be able to do so, they would need external support. Education is the basis for transferring good practices to farmers, who currently often do not consider the long-term implications of their practices. The control of market access (e.g. by private standards required from downstream processors) could be a strong tool to ensure implementation of good practices. But there could also be a risk that small-scale producers get excluded from the market, if these requirements are too demanding or no support is given in achieving compliance. The balance between defining comprehensive requirements to ensure sustainable practices in the field and ensuring that smallholders are not excluded from bioenergy supply chains is the main challenge for smallholder standard development.
Appendix I: People Interviewed

KPS Perintis Pir Bun Ophir
- Pak Asep – head of a kelompok 15
- Pak Sahri – head of a kelompok 19
- Pak Jumadi – head of kelompok 5 and member of the cooperative board
- Pak Selamet – head of a kelompok and head of technical division of the cooperative
- Pak Riznawanto – elected head of the cooperative
- Pak Akbar – secretary of the cooperative and farmer
- Pak Kusno – head of kelompok, former head of cooperative and member of cooperative board
  - 2 farm workers (male)
  - 1 additional farmer (male)

Andalas University
- Prof. Dr. Afrizal, MA

Daulat

Friends of the Earth Indonesia – West Sumatera Office