Making knowledge work for forests and people

Tropenbos International Suriname Programme




Minor Timber Products, Major Challenges?

Tropenbos International Suriname

Minor Timber Products, Major Challenges?

"Na san wi abi dya, na soso Udu wi abi"
("What we have here are only the Woods")

Colofon

Final report on the research, findings and recommendations of the Tropenbos International Suriname project 9206 MTP conducted in cooperation with the Foundation for Forest Management and Production Control (SBB) and Quente: Learning for Living (NL).

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Abbreviations

dbh	diameter at 1.3 m breast height
GoS	Government of Suriname
HFLD	High Forest cover, Low Deforestation rate
MTP(s)	Minor Timber Product(s)
NATIN	Natuur Technisch Instituut (Secondary Technical College)
NFTP(s)	Non Timber Forest Product(s)
PES	Payments for Environmental Services
REDD(+)	Reduced Emissions from Deforestation and forest Degradation (and foster conservation, sustainable management of forests, and enhancement of forest carbon stocks)
RGB	Ministry of Physical Planning, Land- and Forest Management
SBB	Foundation for Forest Management and Production Control
SRD	Suriname Dollar (SRD 1 = SRG 1,000)
SRG	Suriname Guilder (till 31 december 2003)
TBI	Tropenbos International
WUR	Wageningen University and Research (NL)

Acknowledgement

On the 25th of August 2009 the Foundation for Forest Management and Production Control and Tropenbos International Suriname signed a Partnership Agreement aiming to shed light over the role of minor timber products in Suriname's forest based economy under the ambiguous title "Facts and Figures on the role of Minor Timber Products (MTPs) in Suriname's Economy".

Ambitious indeed, as parties at that moment did not have a clue of the challenges they would be confronted with during the course of this research. The harvesting of and trade in minor timber products play an important role in the livelihoods of forest dependent communities in the hinterland. Producers are difficult to trace in these - by large - informal activities of which data are scarce, incomplete and often unreliable. But also the definition of minor timber products appeared to be challenging. SBB forest guards, producers, traders and transporters use various definitions, resulting in confusing and inaccurate registration of these products in SBB transport registers and databases. As a result, the implementation of this research took far more time (and thoughts) than initially anticipated and yielded only in part the expected results. Nevertheless, the outcomes of this project are considered of much value and provide a basis for both policy reform regarding MTPs at SBB level and further research.

This research started based on the work of Edino Kersten, who worked on the issue of MTPs within SBB during his NATIN graduation assignment. He also supported the project during its first stage in which the definitions of the various MTPs were set. We thank him for this support. During the second phase the fieldwork and various interviews with MTP producers was in large done by Romarlisa Bisphan and Serge Toekimin, both 3rd year NATIN students who fulfilled their internship within SBB and were attached to the research team. They were very much committed and did an excellent job, for which we owe them many thanks. Even so we thank Dr. Thomas Lans of Quente (and WUR) for supporting the research team more than we could have asked for in structuring the research, guiding the students and reporting on the fieldwork. And finally we mention and thank Rewichand Matai and his promising 'young professionals' Reshma Ramanand and Romeo Jagessar of SBB for their invaluable contributions. It was a pleasure to work with all of you.

Sietze van Dijk (editor)
Tropenbos International Suriname
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Summary

With approximately 90 % of Suriname's total land area covered in forest (14.8 million ha.), the forestry sector plays a large, potential, role for national development and poverty reduction. This report assesses the opportunities for sustainable production of so-called minor timber products (MTPs). MTPs are timber based by-products from the forest. Bean sticks, tomato sticks, crow legs, fencing poles, firewood and charcoal are examples of MTPs which are used locally in agriculture, construction work, and traditional cremation. MTP production could contribute to the national economy via state forest revenues and simultaneously play a role in poverty reduction in the hinterlands for instance through community-based entrepreneurship. Nonetheless, data on local MTP production which back up and provide more insight in these claims are scare and, if present, often ambiguous.

Over the past decade MTPs contributed close to SRD 15,000 annually to the direct state forest revenues in Suriname. According to the statistics of the Foundation for Forest Management and Production Control (SBB) this is about 0.5 % of the total timber taxation. The potential of MTPs as an income generator from forests is considered to be much higher, both for the state but also for the actors in the MTP product chain. This document reports on the research into the potentials of MTPs as an income generator from forests in Suriname.

The first part of the study aims at defining the various types of MTPs and providing information on the state revenues based on SBB statistics. In total 13 different types of MTPs were distinguished, of which three are hardly produced and not commonly used anymore: pit timber, stirring poles and sleepers. Because of unclear definitions however, these product are sometimes still registered in SBB statistics. The remaining ten types of MTPs are commonly harvested, traded and used (see box). Definitions of these are based on dimensions like length and diameter. This easily allows for mistakes in measurements and subsequent taxation. Grouping of similar kind of MTPs by type, use or dimension will not only reduce the number of (type of) MTPs but also simplify registration, taxation and statistics.

The most commonly known Minor Timber Products (in Dutch: Kleine Houtwaren) are:	
	In Dutch:
Bean sticks	Bonenstaken
Tomato sticks	Tomatenstokken
Crow legs	Kraaienpoten
Light construction timber	Sparrenhout
Fyke net fishery poles	Fuikstokken
Fencing poles	Draadpalen
Cremation poles	Crematiehout
Charcoal	Houtskool
Firewood	Brandhout
Shingles	Shingels

Over the past decade, the levied retribution on MTPs was on average SRD 14,716.00 annually. Although retri-butions should be reviewed at least once every five years, its level remained the same over the last 12 years. The actual and potential

income from MTPs for actors in the MTP product chain could not be analyses through SBB statistics. Here for additional field research was needed.

The second part of this paper reports on an empirical study which was carried out to shed more light on opportunities for sustainable MTP production in Suriname. Based on 18 semi-structured interviews conducted with producers of MTPs the data confirms that MTP production contributes to the income of hinterland and rural communities in Suriname. However, the data also showed that these producers are a heterogeneous group; they differ in terms of production techniques, management and entrepreneurial skills and insight. In terms of forest management it is worrying that 40 % of the producers interviewed do not explicitly make an inventory before they harvest. From a socio-economic perspective the producers earn a reasonable income from MTP production, compared to other MTP chain partners. Work is hard and equipment is simple and most of the producers do not have any detailed insight into the micro-economics of their work. All producers are aware of the fees levied on MTPs by the Foundation for Forest Management and Production Control (SBB). More challenging is the complexity and ambiguity of who is handling formal SBB-transportation documents and who is (eventually) responsible for paying the fees. Key players in this system are the heads of hinterland villages and SBB-officials at check points and at the headquarters.

From a broader, national economic and governance point of view the results provide several challenges. Based on these results, recommendations are given at the local as well as the national level. Firstly, on a local level, if producers want to benefit more from opportunities the MTP production chain offers - for instance through investments in more advanced equipment - awareness should be created about cost price and the importance of forest management in the long run. An increase in awareness might lead to the conclusion that current prices are not sufficient for saving money and investments. Possible intervention strategies to create more room to maneuver can be found in optimizing the production chain (e.g. transportation) or in cooperation amongst local producers to create economies-of-scale.

Secondly, at a national level, if the Suriname government seriously considers investing in MTP production as a means to support the national economy and reduce poverty in the hinterlands, several additional measures need to be taken. A policy directed at this should start with creating high quality data in order to monitor developments on MTP production on a more continuous basis. Findings suggest that there is a necessity to professionalize and streamline current MTP data collection to get more insight into MTP production. The most important recommendation here is: keep it simple. This means that the content as well as the handling of the transportation document, as the main source of production data, should be made as easy as possible. If data is collected in such a way, SBB could develop a proactive role in i) reporting data, ii) signaling potential hurdles in the production chain such as local conflicts or illegal transportation, iii) determining a reasonable production fee, and iv) making their work more efficient by focusing on the most vulnerable or lucrative MTPs.

Introduction

Based on its National Forest Policy (2005), paragraph 5.2, the Government of Suriname (GoS) aims to improve the contribution of forests to the socio-economic development of the country. Till now, the production of round wood (logs) and timber is recognized as being the main income generating commodity from Suriname's forests (Bhairo *et al.*, 2009). However, over the last decades, round wood production stagnates around 180.000 m^3 annually and is too small to sustain the national forest sector and its administration. Next to an increase of round wood production, improved management of the production of non-timber forest products (NTFPs) and exploring the income generating options of 'payments for environmental services' (PES) and REDD+ (Reduced Emissions from Deforestation and forest Degradation and foster conservation, sustainable management of forests, and enhancement of forest carbon stocks) mechanisms, minor timber products (MTPs), if effectively channeled into the formal economy, may contribute to a more solid and sustainable forest based economy. As part of this effort, the Foundation for Forest Management and Production Control (SBB) under the Ministry of Physical Planning, Land- and Forest Management (RGB) wishes to improve insight and knowledge on the (socio-) economics of MTPs, both for those involved in the MTP production chain and for the national forest based economy.

Against this background, on the 25th of August 2009, SBB and Tropenbos International Suriname (TBI Suriname) signed a Partnership Agreement aiming to shed light over the role of minor timber products in Suriname's forest based economy entitled "Facts and Figures on the role of Minor Timber Products (MTPs) in Suriname's Economy". Improved knowledge on the socio-economics of the production and trade of MTPs may provide a sound basis for policy reform regarding production control and taxation of these products. These reforms should benefit both forest dependent communities and the government's forest policy objective to improve the contribution of forests to the socio-economic development of the country. In the Partnership Agreement this was worded in the research hypothesis:

> *The production of MTPs is considered an informal income generating activity that requires only very little capital investment while yielding short-term revenues. Effective regulation of production and trade of these products may directly contribute to poverty alleviation of the rural poor and forest dependent people. Furthermore, effective regulations can provide a sound basis for sustainability in this branch of forest activity.*

The research within the scope of this project was done in a two-stage approach: the first stage aimed at reaching consensus on the definition of MTPs, the second aimed at gaining insight in the MTPs chain of production from producer to consumer.

Consensus in defining the various MTPs was reached by analysing the SBB statistics and conducting a limited number of informal interviews with producers and traders. The

results were then presented and discussed with the SBB staf and the SBB forest guards who are in charge of production control though the verification of formal transport documents and truck loads at the fixed SBB control posts at the main roads towards Paramaribo. The discussions resulted in a set of detailed specifications (metrics) for 13 different types of minor timber products. Analysis of the SBB statistics on MTPs over the periode 2000-2008 learned that the state direct revenues (retributions) added up to an average of SRD. 14,716,00 per annum. The results of this first stage of research were presented in the TBI Suriname Infosheet entitled "The potential of Minor Timber Products as an income generator from forests in Suriname" (2010). The full text of this infosheet forms part I of this report.

During the second stage of this project an empirical study was carried out to enhance knowledge on the socio-economics of MTPs and the opportunities for more sustainable MTP production in Suriname. Based on 18 semi-structured interviews with producers of MTPs the research confirms that MTP production contributes to the income of rural communities in Suriname. From a socio-economic perspective the producers earn, compared to other MTP chain partners, a reasonable income for MTP production, however, most of the producers do not have any detailed insight into the micro-economics of their work. Although all producers are aware of the SBB-fees involved in producing MTPs, it is not always clear who is handling formal SBB-transportation documents and who is (eventually) responsible for paying these fees. Key players in this system are the head of the villages and SBB-officials at the check points and headquarters. The results of this second stage of the project are described in the research report entitled "Minor Timber Products, Major Challenges?" (SBB, TBI Suriname & Quente, 2010) of which the full text forms part II of this report.

The combined results of both phases of this project will be presented to stakeholders and provide input for a national debate on the topic. The outcomes of these deliberations will be summarized and disseminated through the distribution of a conclusive infosheet and/or policy brief to be published by both TBI Suriname and SBB.

PART I: Setting the scene; the definition and registration of Minor Timber Products[1]

Introduction

Over the last years Minor Timber Products (MTPs) contributed close to SRD 15,000 annually to the direct state forest revenues in Suriname. According to the statistics of the Foundation for Forest Management and Production Control (SBB) this is about 0.5 % of the total timber taxation. The potential of MTPs as an income from forests is considered to be much higher. Apart from increased state revenues, all actors in the chain of MTPs production, both producers and traders, may benefit from improved governance, policy and management. When integrated in forest management planning, MTPs may be an attractive option to increase the profitability of sustainable forestry, in addition to logs. Sustainable production of MTPs may thus benefit both forests and people.

The potential of Minor Timber Products as an income generator from forests in Suriname

Over the last years Minor Timber Products (MTPs) contributed close to SRD 15,000 (± US$ 5,250) annually to the direct state forest revenues in Suriname. According to the statistics of the Foundation for Forest Management and Production Control (SBB) this is about 0.5% of the total timber taxation. The potential of MTPs as an income generator from forests is considered to be much higher. Apart from increased state revenues, all actors in the chain of MTPs production, both producers and sellers, may benefit from improved governance, policy and management. When integrated in forest management planning, MTPs may be an attractive option to increase the profitability of sustainable forestry, in addition to logs. Sustainable production of MTPs may thus benefit both forests and people.

Looking into the potential of MTPs for increasing income from forests, first consensus among stakeholders should be reached on the definition of MTPs. In this effort, there appeared to be a difference between formal definitions and dimensions as described in legislation and the ones used in the (informal) market of these forest products. This information sheet reflects the outcomes of these discussions, thus providing an initial baseline for further research into the potentials of MTPs. Fieldwork and interviews with stakeholders may still provide new insights resulting in even more accurate descriptions of the various MTPs and its market potentials.

Furthermore, this information sheet summarizes the registered MTP production over the period 2000 - 2008. Actual production, however, is expected to be much higher. Scheduled field observations and interviews with both producers and sellers, aiming at collecting reliable data on the actual production, may support this assumption.

What are MTPs?

Minor timber products (see box) are produced in rural and forest areas. Their harvest contributes directly to the livelihood of rural and forest based communities. Their production involves low capital investment and high labor input, which makes it highly suitable to the possibilities of these communities. MTPs are harvested both within and outside formal timber concessions but, regardless of their origin, MTPs are - generally spoken - not included in formal forest management planning.

The production of MTPs requires limited or no further processing at all. *Minor processing* is usually performed manually by the producers themselves

The most commonly known Minor Timber Products (in Dutch: Kleine Houtwaren) are:

	In Dutch:
Bean sticks	Bonenstaken
Tomato sticks	Tomatenstokken
Cow legs	Koeienpoten
Light construction timber	Spanenhout
Fyke net fishery poles	Fuikstokken
Fencing poles	Draadpalen
Cremation poles	Crematiehout
Charcoal	Houtskool
Firewood	Brandhout
Shingles	Shingels

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[1] Based on the TBI Suriname Infosheet "The potential of Minor Timber Products as an income from forests in Suriname" (2010) produced in cooperation with the Foundation for Forest Management and Production Control (SBB).

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The production of MTPs requires limited or no further processing at all. Minor processing is usually performed manually by the producers themselves (e.g. rifting, sharpening, peeling). Part of the products is sold outside formal markets, directly to the users without intervention by middlemen, provided that there are means of transportation. Mostly, however, entrepreneurs form the link between producers and users by placing orders for the production of MTPs.

Based on a governmental decree which most recent version originates from 1998 the SBB levies fees on MTPs by specified quantity (piece, bunch, stacked meter or cubic meter) depending upon their type.

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SBB timber registration and taxation

The SBB national statistics on timber production differentiate between:

- Round wood: commercially harvested logs from licensed forests (formal concessions, community forests and conversion forests), according to SBB-approved annual cutting plans, with diameters at 1.30 m breast height (dbh) no less than 35 cm. This category also includes squared logs.
- Poles: medium sized logs that are commercially harvested from licensed forests only after prior approval from SBB, with dbh ranging from 15 up to 35 cm.
- Chain sawn lumber: at stump produced lumber (boards) by use of a chainsaw, both free hand (chainsaw lumbering) or with mounted attachments such as guiding frames (chainsaw milling).
- Minor timber products: this category covers a wide range of timber based products that are commercially collected from all types of forests and processed in-situ from saplings and trees with a dbh up to 15 cm.

The first two categories, logs and poles, are recorded and taxed on the basis of volume. This also applies for chain sawn lumber, based on a recovery rate of 50 %. MTPs are registered and taxed on the basis of quantity.

Most commonly traded MTPs

In Suriname, producers, traders and users distinguish the following MTPs:

- Bean sticks: wooden sticks with an average length of 2.0 m (+/- 10 %) and an average diameter (measured halfway its length) of 2.5 cm (+/- 10 %) used in horticulture to support the growth of climbing plants, such as yard long beans.
- Tomato sticks: wooden poles with an average length of 1.75 m (+/- 10 %) and an average diameter of 4.5 cm (+/- 10 %) used in horticulture to support the growth of smaller climbing plants, such as tomatoes.
- Crow legs: medium sized poles with varying length of 3 - 5 m and a diameter between 7.5 – 10.0 cm used to support formwork while pouring concrete top floor constructions.
- Light construction timber: medium sized debarked poles and sticks traditionally used as studs and beams for the construction of temporary shelter, traditional housing, huts and forest camps by forest dwelling communities. Depending on the construction, their size varies in length with diameters between 7.5 – 15.0 cm.
- Fyke net fishery poles: round wooden poles (most commonly Manbarklak (*Eschweilera coriacea*)) with a minimum length of 8 m and an average diameter of 15 cm halfway its length used to support fishing fykes and nets.

Table 1: MTPs definitions, production and revenues based on SBB statistics 2000-2008

	MTP 'market' definition	MTP according decree no. 1971/98	Unit for taxation	Tariff per unit (in SRD)[a]	Mean annual production 2000-2008	Mean annual state revenue (in SRD)
1	Bean sticks	Bean sticks	piece	0.005	323,000	1,615.00
2	Tomato sticks	Bean sticks	piece	0.005	8,200	41.00
3	Crows legs	Light construction timber, pit timber and stirring poles	piece	0.050	24,300	1,215.00
4	Light construction timber	Light construction timber, pit timber and stirring poles	piece	0.050	6,100	305.00
5	Pit timber	Light construction timber, pit timber and stirring poles	piece	0.050	900	45.00
6	Stirring poles	Light construction timber, pit timber and stirring poles	piece	0.050	900	45.00
7	Fyke net fishery poles	Light construction timber, pit timber and stirring poles	piece	0.050	800	40.00
8	Fencing poles	Fencing poles > 2.4 m	piece	0.100	70,000[b] (50% of total)	7,000.00
9	Cremation poles	Fencing poles ≤ 2.4 m	piece	0.050	70,000[b] (50 % of total)	3,500.00
10	Charcoal	Charcoal	bag of ≈ 25 kg	0.100	8,100	810.00
11	Firewood	Firewood	stacked meter	0.100	1,000	100.00
12	Shingles	Shingles	piece	0.005	0	0.00
13	Sleepers	Sleepers	piece	0.250	0	0.00
					TOTAL mean annual state revenues:	**SRD 14,716.00**

[a] Although decree no.1971/98 mentions the tariffs per unit in Surinamese Guilders, tariffs are expressed in SRD here (SRG 1000 = SRD 1).
[b] An estimated 50 % as SBB statistics do not differentiate between 'fencing' and 'cremation' poles.

- Fencing poles: traditional split-timber debarked poles (mostly cleaved from Walaba (*Eperua falcata*)) with a preferred length between 2.0 and 4.5 m and a minimum 'middle-size' of 5 cm.
- Cremation poles: used for traditional 'open air' cremation from Walaba (*E. falcata*) with fixed dimensions 1.35 and 2.35 m length and a minimum 'middle-size' of 5 cm.
- Charcoal: Carbon coal derived from incomplete combustion of wood used for cooking, barbecuing and orchid growing.
- Firewood: free collected fuel wood used for cooking.
- Shingles: A thin oblong piece of wood (most commonly from Walaba (*E. falcata*)) used as roofing material.

The 1992 Suriname Forest Management Act and its associated governmental decrees do not recognize the same categories of MTPs as producers and users. Some of the products, e.g. fencing- and cremation poles, are combined in these legislations. On the other hand, state decree no. 1971/98 of 1998 dealing with the taxation on MTPs, refers to products that are hardly or not traded anymore, e.g. pit timber used in bauxite mining operations or stirring poles formerly used in the aluminum production plant at Paranam. In the annual production statistics of the SBB however, these MTPs are still recorded and levied. As a result, the records on the production of MTPs are confused due to non-standardized allocation of products to taxable categories.

MTPs in the law

Decree 1971/98 gives an overview of MTPs and the levels of fees to be collected by the SBB. Although the decree specifies that fees should be renewed at least once every 5 years, this has not been implemented. Tariffs on MTPs remained on the same level over the past decade (table 1).

The case for continued research on MTPs

Based on previous research (Kersten, 2009) it is expected that the SBB statistics represent a severe underestimation of the actual production of MTPs both for subsistence use and selling to the local markets. This reflects to some extent inadequate recording or illegal practices, but may also be due to a lack of awareness of formal legislation by those who are engaged in collecting MTPs. To gain better insight in the magnitude of harvesting, processing and marketing of MTPs, more research is needed.

At first sight, from the documented revenues, it might appear unjustified to maintain the SBB law enforcement system, the collection and administration of levies and the annual reporting on MTPs.

However, justification may be found in the following:

1. It should be kept in mind that the official figures only reflect the state revenues, based on insufficient production data and outdated tariffs. Considering all actors in the production and marketing chain of MTPs, the 'economics' of MTPs and its role in rural livelihoods can be considered much higher.

2. Minor timber products are produced from a limited number of tree species. Unlimited production of MTPs in an unevenly distributed manner may result in depletion of tree species and loss of associated plant and animal biodiversity. Some collectors already face local extinction of the required MTPs. Harvesting of MTPs should therefore be better managed, which requires further research.

3. Forest management planning only includes the harvesting of round wood of more than 35 cm dbh. During felling and skidding much of the undergrowth, from which most of the MTPs are produced, is destroyed. The production of MTPs should therefore be included in forest management and annual harvesting plans. MTPs might be harvested prior to tree felling.

PART II: Minor Timber Products, Major Challenges?[1]

Introduction

With approximately 90 % of Suriname's total land area covered in forest (14.8 million ha.), the forestry sector plays a large, potential, role for national development and poverty reduction. This report assesses the opportunities for sustainable production of so-called minor timber products (MTPs). MTPs are timber based by-products from the forest. They do not include round wood (logs) and sawn wood, well known forest products that are commercially harvested and processed from licensed forests. Bean sticks, tomato sticks, crow legs, fencing poles, firewood and charcoal are examples of MTPs which are used locally in agriculture, construction work, and traditional cremation.

It is not just the type of wood or application that defines MTPs, but also the way they are harvested and produced. According to Tropenbos International Suriname (2010), production is (predominantly) done outside formal forest-management planning; it involves low capital investments and often hard manual work for the producers. The production of MTPs contributes directly to the livelihood of rural and forest based communities. After harvesting, MTPs require little or no further processing, they are already the end product.

Over the last decade policy and research on MTPs production has gained interest (Antinori & Bray, 2005; Donovan *et al.*, 2006; Thomas *et al.*, 2003). On the one hand this interest originates from a forest management perspective; there are serious concerns about local extinction of species due to MTP harvesting. On the other hand, MTP production has gained interest from a broader socio-economic point of view. MTP production could also contribute to the national economy via state forest revenues and simultaneously play a role in poverty reduction in the hinterlands for instance through community-based entrepreneurship. Nonetheless, data on local MTP production which back up and provide more insight in these claims are scare and, if present, often ambiguous. Reality is that robust data on MTP production are difficult to collect.

This paper reports on an empirical study which was carried out to shed more light on opportunities for more sustainable MTP production in Suriname. With more sustainable we refer to the triptych of people, profit and planet. This study builds on the work carried out in Suriname by Groenfeld & Nelson (2002) and Kersten (2009).

[1] Based on the research report "Minor Timber Products, Major Challenges?" (2010) by Reshma Ramanand & Romeo Jagessar (both SBB), Sietze van Dijk (TBI Suriname) and Thomas Lans (Quente).

Methods

Since MTP production is dominated in certain regions in Suriname, three main areas of production were selected, namely: Para, Brokopondo and Marowijne districts (the latter also included parts of the Commewijne district). This selection was based on the statistics of the Foundation for Forest Management and Production Control (SBB). According to these numbers, the three areas cover more than 95 % of the registered MTP production in Suriname in 2008. A fourth area, the Saramacca district, was investigated as well, since production statistics did mark some activity. However, further investigation showed that actual activity in MTP production in this district was very limited or even non-present according to local authorities.

Producers of MTPs mostly live in the hinterlands, are difficult to track, predominantly speak local languages and have few or no formal educational qualifications. Therefore, the following research strategy was adopted. Firstly, producers were located by means of snowball sampling, starting with i) names that were known via official SBB-registration, ii) via personal contacts and iii) via the heads (captains, "kapiteins" in Dutch) of hinterland villages. Secondly, personal interviews with the producers were conducted in a semi-structured way, leaving much room for the respondents' ideas and thoughts on the issues that were addressed. Thirdly, handwritten and digital notes were made on the spot and fourthly, after visiting a district all notes were collected and discussed within the research team to reflect; sharing thoughts and experiences. Topics that were discussed in the interviews included:

- the production process (knowledge and tools involved in MTP harvesting);
- the type and amount of MTPs harvested;
- the establishment of prices (e.g. by means of presenting an exemplary case);
- the contribution of the MTP production to income.

To guarantee confidentiality and gain trust from the respondents, participants were assured that interviews were anonymous. Data was analyzed using simple descriptive statistics to gain specific insights and hierarchical cluster analysis in order to identify similarity between groups of producers. Cluster analysis is an analytic technique used to classify data into a limited and, ideally, small number of groups based upon two or more variables. Sometimes there is a specific hypothesis guiding cluster analysis, but more often there is little or no information guiding the formation of groups. Cluster analysis can thus, as in this research, be seen as an explorative research instrument to search for 'groups' of producers. There are a number of clustering algorithms available (e.g. via SPSS), which all have in common that they search for mathematical distances between individuals and groups of observations. In this specific research we collected dichotomous data (e.g. presence or absence of making an inventory before harvesting) which we used for cluster analysis. Such data limits the type of algorithms that can be used, e.g. Jaccard, Russell/Rao and Dice indices (Finch, 2005).

Results

Respondents

Of the 40 producers registered in the SBB-statistics, 12 could be traced and interviewed. Additionally, via snowball sampling 6 producers were interviewed that were not officially registered at SBB. The total of 18 respondents included 5 producers from the Para, 5 from the Brokopondo and 8 from the Marowijne district. The producers had little or no formal educational qualifications, 90 % of the producers only attended some years of primary education, sometimes switching to lower vocational education for one or two years. Two producers followed some years of intermediate/secondary vocational education. The majority (16) of the producers was between the age of 30 and 65, two producers were younger, between 18 and 30. All producers were male. The interviewed producers harvested and/or produced a wide variety of MTPs, including bean and tomato sticks, crow legs, light construction timber, fencing poles, charcoal and shingles (wooden tiles usually of Wallaba (*Eperua falcata*) used for constructing roofs and for paneling purposes). Production of MTPs was mainly carried out in community forests, outside formal timber concessions.

Production process

In our sample the majority (72 %) of the producers referred to themselves as 'continuous' producers, some just started (17 %) or were diminishing their production activities (11 %). The production process data showed that most producers start harvesting only when they get a direct order from end-users or middlemen. Problems with 'no-shows' from costumers and the fast decay of harvested wood are given as explanation for why they do not produce MTPs in stock.

Furthermore, 60 % of the producers indicated that some kind of inventory of the forest area was made before they start harvesting MTPs. About 20 % does not make any kind of inventory and another fifth (20 %) -predominantly the people with strong indigenous, Amerindian, roots, indicate that 'they just know' where they can find certain tree species. Harvesting of MTPs is done by hand using simple equipment like a machete, axe and chisel. Exact procedures of harvesting depend on the type of MTPs. Whereas bean and tomato sticks require only simple handlings, cutting and sharpening, the harvesting of fencing poles from Wallaba is more laborious since it also requires rifting and peeling. In a few cases a chainsaw was hired to speed up harvesting. After being harvested, the products are transported by hand to a central location in the forest or the nearby settlement (i.e. 'landing').

At the landing MTPs are collected from where they are sold to an end user or middleman and further transported by trucks to the city. The money earned by the producers is directly divided by the men who harvested and processed the products. This is also the point in time were the contribution of most producers to the MTP production chain ends and, at the same time, the moment when formal forest registration and taxation comes

into play (figure 1). In order to be allowed to transport the MTPs to the city the transporter needs a formal SBB transportation document. Generally speaking the head of the local village is responsible for buying and further handling these documents. However, in cases respondents indicated that transporters already had their own transportation documents which they obtained from SBB directly. In these cases the village heads are bypassed (see red lines figure 1).

On the way to the city, MTP transport (with corresponding documents) is inspected again at local check points which are staffed by SBB. Finally when the product enters the city the transporter needs to go and pay a fixed fee (retribution) for the different MTP species at SBB head quarters. The subsequent route of the product depends on its use. Most of the products will be sold to retailers or to other middlemen, some of it will be used directly for own purposes and a small percentage will be made ready for export (in particular shingles). See figure 1 for a schematic overview of the production process of MTPs.

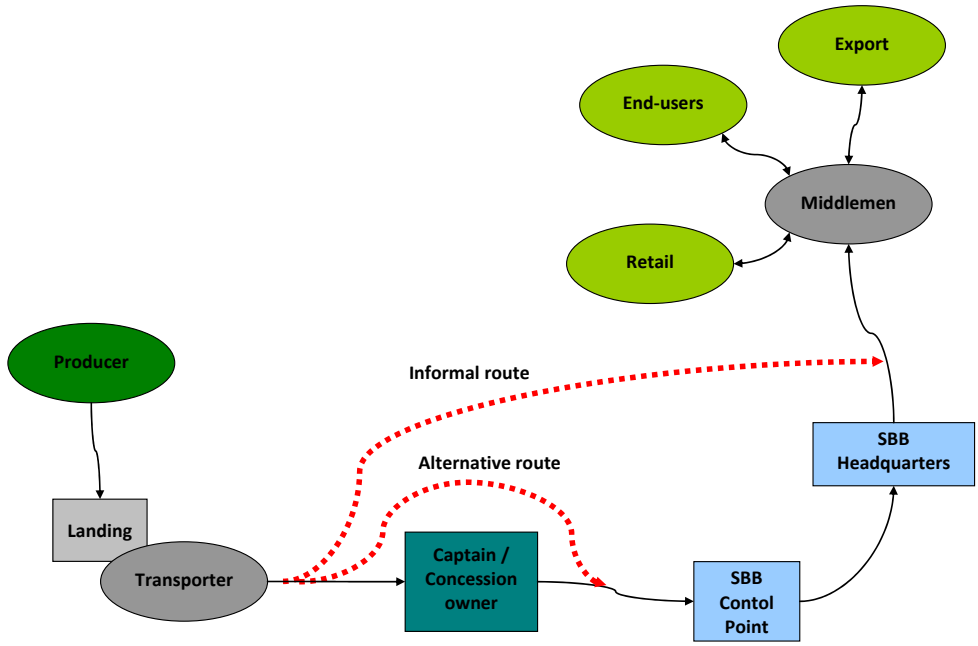

Figure 1: Schematic overview of the MTPs transportation routes

Type and amount of product harvested

The producers in the sample were not always willing to share their production numbers. Therefore only from 15 of the 18 cases we had production data (table 1). From these data it can be seen that with this small sample a relatively high percentage of the total (officially) registered production in 2008 is captured. For charcoal, our respondent produced more in the first eight months of 2010 than what was registered in the whole of 2008 for all producers.

Table 1: MTP production statistics in numbers

MTP market definition	2008[a]	Production in 2010 as indicated by respondents[b]
Bean sticks	204,432	31,000 (n=4)
Crow legs	37,630	11,000 (n=2)
Tomato sticks	32,898	10,000 (n=1)
Fencing poles	121,260	26,000 (n=7)
Light construction timber	4,815	-
Fire wood	22,920	-
Charcoal (kg)	7,000	8,000 (n=1)

[a] Source: SBB statistics 2008
[b] Production until the end of August 2010
Note: official 2009 data was available but needed some additional work in order to be published.

Official SBB-statistics suggest different patterns of MTP production for different types of MTPs in the past decade. These statistics indicate that production of crow legs and tomato sticks during the past decade has increased; the production of bean sticks over these years has decreased whereas the production of fencing poles has remained fairly stable. The production data of other MTPs varies enormously during the past 10 years, making it hard to detect a 'trend'. Based on the respondents perception of an increase/decrease of their own production during the past 5 years table 2 was constructed.

Table 2: Perceived MTP production increase/decrease over the last five years according to the producers

MTP market definition	Decrease	Increase	SBB statistics
Bean sticks (n=5)	40 %	60 %	decrease
Crow legs (n=4)	50 %	50 %	increase
Tomato sticks (n=3)	33 %	67 %	increase
Fencing poles (n=10)	30 %	70 %	stable
Average	38 %	62 %	

On average 62 % of the respondents saw an increase in MTP production, 38 % saw a decrease of their production (table 2). That last group included mainly producers who had problems with their production because of conflicts with transporters or within a certain local community. Interestingly, according to the producers three important MTPs, bean sticks, crow legs and fencing poles seem to follow different patterns than suggested by SBB formal statistics. What also became clear from the discussion with producers was that production of MTPs has different dynamics throughout the year. Production peaks for MTPs are in general in the dry periods when the roads are most accessible. However, for specific MTPs like bean sticks, tomato sticks and charcoal the production peaks also

follow market demands. Production peaks for these product are in the wet season (sowing time in agriculture) and at the end of the year (festivities which demand charcoal).

Establishment of prices

Contrary to anecdotal evidence that "only middlemen would be earning from harvesting MTPs", all actors have a share in the MTP value-chain (table 3). To give an example, a regular consumer in the city would pay about 6 Suriname Dollars (SRD) for a 2 meter fencing pole (August 2010). The same poles are being produced for a cost between 2 and 3 SRD. This is without transportation costs from the hinterlands to the capital Paramaribo. Transportation costs per pole are about 2 to 2.50 SRD. This means that the retail or other middlemen make a maximum of 2 SRD per fencing pole, i.e. just the same as the producers earn with it. Furthermore, the data showed that there are only small differences between the production prices that are being asked for between the investigated districts. Only the area of Marowijne was significantly more expensive in terms of production and transportation costs.

Table 3: Producer and end-user prices per MTP unit in 2010

MTP market definition	Unit	Producers prices in SRD per unit (n=18)	Retail prices in SRD per unit (n=6)
Fencing poles < 2.5 m	Meter	1.36	3.00
Fencing poles > 2.5 m	Meter	1.35	2.97
Bean sticks	Piece	0.18	0.29
Tomato sticks	Piece	0.25	0.60
Crow legs	Meter	0.46	1.00
Charcoal	Kg	0.45	-
Light construction timber	Meter	1.13	-
Shingles	Piece	0.63	-

Although the producers of MTPs do not calculate an hour price, we were able to reconstruct their wages based on exemplary cases we presented to the producers. On average, the producers earn around 15 SRD per hour for harvesting MTPs (table 4). However, one should be careful when interpreting these wages, since we were not able to filter out the effects of using more advanced equipment like a chainsaw. Although the producers said that renting a saw will cost about 70-75 SRD per day, it is unclear what the benefits are in terms of labor productivity.

Table 4: Average production earnings per product per hour

MTP market definition	SRD[a]
Fencing poles (n=8)	14.4
Bean sticks (n=4)	16.7
Charcoal (n=2)	15.8

[a] We have calculated these numbers based on a 6 hour working day.

Transportation costs are very difficult to interpret. It is clear that costs per km as well as costs per piece differ enormously according to producers (table 5). Since the producers in most cases do not transport MTPs themselves (figure 1) it might be difficult for them to assess transport costs to the city. The type of transport influenced the transport costs per MTP piece. For instance, using a large flat back truck instead of a pick-up decreases transportation costs of bean sticks from production site to the city by a factor 10.

Table 5: Transportation costs for MTPs according to the producers

Area	MTP market definition	Load size (units)	Transportation cost per load (SRD)	km	Costs/km	Costs/ piece
Para	Bean sticks	1,000	350	60	5.83	0.35
Para	Fencing poles	200	200	70	2.86	1.00
Marowijne	Fencing poles	500	1,500	110	13.64	3.00
Marowijne	Fencing poles	1,000	2,500	170	14.71	2.50
Marowijne	Fencing poles	500	1,500	130	11.54	3.00
Marowijne	Fencing poles	2,000	1,700	170	10.00	0.85
Marowijne	Fencing poles	500	1,500	78	19.23	3.00
Brokopondo	Fencing poles	100	600	75	8.00	6.00
Brokopondo	Bean sticks	25,000	750	55	13.64	0.03[a]

[a] Transportation was carried out with a flat back truck which is able to transport large amounts.

Finally, all producers were aware of the fact that MTPs fees (retributions) need to be paid to the state. However, who is paying these fees is a complicated story. In some cases it is the producers, in some cases the transporters or middlemen, and in another case the head of the village (the captain). This makes collection of fees (unnecessary) complicated leading to misunderstanding and in two cases the producers even reported conflicts in rural communities.

Contribution to income

For almost 95 % of the interviewed producers the production of MTPs was their most or second-to-most important source of income. As one of the producers phrased it:

"Na san wi abi dya, na soso Udu wi abi"

("What we have here are only the Woods")

Despite this importance only a fifth of the producers had detailed insight in the costs and benefits of MTP harvesting. In addition, the majority (72 %) of the producers had no strategy for developing their MTP practice further. This does not mean that the group of producers is one homogenous group in terms of their production techniques, their management and entrepreneurial skill and insight. The cluster-analysis showed that based on these variables no definite grouping of producers can be made. They all differ in terms of craftsmanship, management and entrepreneurship and how they go about their small business. For instance, it cannot be concluded that the group of producers who see MTP production as their primary source of income are also the producers who see an increase in their income, or produce most traditionally. Neither that producers who have a detailed insight in their cost price are the same ones who make a detailed inventory of their forest before they harvest. Based on our data such conclusions could not be drawn.

Conclusions and discussion

Based on 18 semi-structured interviews conducted with producers of MTPs we have tried to assess the opportunities for sustainable MTP production in Suriname. First of all, the data confirm that MTP production contributes to the income of rural communities in Suriname. Almost 95 % of the interviewed said the production of MTP was their most or second-most important source of income, and 60 % indicated that production of MTPs has grown over the last years. However, the data also showed that these producers are a heterogeneous group; they differ in terms of their production techniques, their management and entrepreneurial skill and insight. In terms of forest management, 40 % of the respondents do not explicitly make an inventory before they harvest. Although half of these 40 % are indigenous producers who claim they just know where certain species are, we were not able to check this, so it is something to consider critically from a forest management perspective.

From a socio-economic perspective the producers earn, compared to other MTP chain partners, a reasonable income from MTP production. However, work is hard and equipment is simple and most of the producers do not have a detailed insight into the micro-economics of their work. This is the weak point of current MTP production. When we reconstructed cost prices, these prices consist of labor costs with little extra's. It is unclear to what extent modern investments, like a chainsaw, will change cost structure and what the return-on-investment will be. Moreover, our results indicated that (perceived)

transportation costs differ enormously. This is probably due to road conditions in certain areas (in particular the Marowijne district), but also influenced by type of transport and therefore efficiency. This part of the production chain might be optimized for instance by transporting larger loads per trip using trucks instead of pick-ups.

From a broader, national economic and governance point of view the results provide several challenges. All producers are aware of the SBB-fees involved in producing MTPs. More challenging is the complexity and ambiguity of who is handling formal SBB-transportation documents and who is (eventually) responsible for paying the fees. For instance the producers themselves indicated that handling of these documents was a source of conflict in some villages. What is illustrated in figure 1 is that besides a formal payment route, other informal or even illegal shortcuts are possible. Hence, in line with what our data suggests, formal SBB production statistics - which are based on transportation documents - are vulnerable to multiple errors. Key players in this system are the heads of the villages and SBB-officials at the check points and headquarters.

The study as is has been carried out is not meant to be conclusive. For instance, we were not able to estimate the total number of producers, nor answer the question how representative this sample is. Furthermore, since there is no explicit registration of activities by the producers, we had to depend on retrospective, self-reported data which are known to be vulnerable to inaccuracy. What people say often differs from what they really do. Factors that contribute to this inaccuracy include reference groups (who do they compare with), meta-skills of the respondents (i.e. self-awareness and insight), social manipulation (i.e. social desirability) and using crude rules of inference (e.g. it happened yesterday…). In this type of research these problems are difficult to avoid. We tried to address these problems by using multiple researchers with strict tasks (e.g. making notes, doing the interview), discussing the results afterwards and using different approaches to get an answer to a certain question. The setting for our interviews was not always as desired. Sometimes it was impossible to find a convenient, separate, place to do the interview; others present could influence the answers the producers gave (i.e. social desirability). We also noticed that producers were very suspicious to talk about their production activities, since they felt that we might be monitoring their (illegal) activities and inform local authorities about this. For instance, we suggested audio-recording of the interviews which all of them refused. So, building trust was essential but not always easy to do.

Recommendations

Based on both part of this research, but mainly on the conclusions and discussion of the empirical study (part II) the following recommendations can be made.

Firstly, at the local level, if producers want to benefit more from opportunities the MTP production chain offers - for instance through investments in more advanced equipment - several hurdles need to be taken first:

- To start, awareness should be created about costs price and the importance of forest management in the long run. Only a few producers were harvesting in a structured way and had an advanced understanding of the way how prices were established;
- An increase in awareness might lead to the conclusion that current prices are not adequate for saving money and for investments. Possible intervention strategies to create more room to maneuver can be found in optimizing the production chain (e.g. transportation) or in cooperation amongst local producers to create economics-of-scale. An option we did not investigate is to find out whether local consumers are willing to pay more for these forest by-products, and if so, under which conditions.

It should be kept in mind that producers are a heterogeneous group and therefore should be treated as such when interventions are suggested. This implies that 'one-size-fits-all' type of interventions should be avoided. If a project targets MTP producers it is crucial that factors like socio-economic background and type of MTP production are included in the approach.

Secondly, at a national level, if the Suriname government seriously considers investing in MTPs as a means to support the national economy and reducing poverty in the hinterlands, several additional measures need to be taken. A policy directed at this should start with creating adequate data in order to monitor developments on MTP production on a more continuous basis. Findings suggest that there is a necessity to professionalize and streamline current MTP data collection to obtain a better understanding of MTP production data. The most important recommendation here is: keep it simple. This means that the content as well as the handling of the transportation document, as the main source of production data, should be made as easy as possible. Concretely:

- Clarity should be given about 'problem' MTP categories. Two categories deserve attention: i) should charcoal be included in formal SBB-statics, since most of it is produced from waste wood and non-commercial species? and ii) is it necessary (and if so how) to differentiate between fencing poles and fire wood used for traditional cremation since both are from the same Wallaba species, but are used for different purposes?
- Present definitions of all MTPs are based on dimensions like length and diameter. This easily allows for mistakes in measurements and subsequent taxation. Grouping of

similar kind of MTPs by type, use or dimension will not only reduce the number of (type of) MTPs but also simplify registration, taxation and statistics;

- Subsequently, to work with predefined categories of MTPs in the transportation document in order to further standardize and educate the stakeholders involved in handling MTPs. Currently, the quality of the data from the transportation document depends on the 'interpretation' by the person handling it. SBB already made an important step in this by defining such categories together with local stakeholders (Tropenbos International, 2010) ;
- In case of community forests (where most of the MTP production takes place) all formal documentation should be channeled through the responsible village heads (the captains), they are the linking pins;
- In order to 'smoothen' the handling process, all stakeholders (head of villages, middlemen, rangers, secretary of SBB) involved in registering, controlling and paying the fees for MTP production should be trained in order to create clarity about rules and responsibilities;
- When data is collected at SBB, data entry should be standardized (comparable to the 'logpro' software used for round wood) in order to avoid mistakes in data entry.

If data is collected in such a way SBB could develop a proactive role in i) reporting data, ii) signaling potential hurdles in the production chain such as local conflicts or illegal transportation, iii) determining a reasonable production fee (fees have not changed over the past 12 years), and iv) making their work more efficient by focusing on the most vulnerable or lucrative MTPs instead of all 13 categories listed in earlier research (Tropenbos International, 2010). In order to do so we suggest that:

- Monitoring should be improved by producing statistics every three to four months and checking for abnormalities and irregularities;
- Based on our knowledge that production peaks of MTPs are different for the categories, monitoring can be intensified when there is a peak in production of a particular MTP.

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ANNEX 1: MTP producers questionnaire (in Dutch)

Algemene gegevens:

Formulier #	
Datum :	
District:	
Plaats/locatie :	
Terrein gegevens:	
Contactgegevens Kapitein:	

Gegevens producent:

Naam (niet verplicht):		
Type (kruis aan):	❑ Producent ❑ 2e opkoper / tussenhandelaar	❑ 1e opkoper & producent ❑ consument
Leeftijd (kruis aan):	❑ < 18 jr. ❑ 18-30 jr. ❑ 30-65 jr. ❑ > 65 jr.	
Opleiding (kruis aan):	❑ Geen ❑ Alg. Voorbereidend ond. (mulo) ❑ Alg. Voortgezet ond. (havo/vwo)	❑ Voorbereidend eroepsond. (Lts/..) ❑ Voortgezet beroepsond. (Natin/.. ❑ Anders, nl……

Tips

- Het vragenformulier blijf anoniem.
- Maak foto's van de plek waar je interviewt.
- Als er onduidelijk is over de definitie laat een foto zien van wat je onder een bepaalde soort verstaat.

Gebruik bij het interview altijd de volgende **strategie**:

- **Stel** de vraag uit het vragenformulier;
- **Luister** naar het antwoord dat de producent geeft;
- **Samenvatten**: vat het antwoord dat de producent geeft **kort samen** in je eigen woorden;
- **Doorvragen**: vraag of je samenvatting klopt, vraag om uitleg en toelichting waar je punten niet begrijpt.

Wees kritisch op de antwoorden die je krijgt!

1. Wanneer u een bestelling binnen krijgt , hoe gaat u dan te werk ?

- hoe inventariseert u (waar, welke soorten, etc.)
- wat zijn de productiemiddelen?
-wat gebeurt er na het kappen?

2. Welke soorten kleine houtwaren produceert u, hoeveel zijn dat er gemiddeld per maand, wat is de gemiddelde verkoopprijs en is deze veranderd over de laatste jaren?

Soort volgens beschikking	Markt benaming	Aantal per maand/ jaar	Lengte / diameter	Ontvangen bedrag per eenh.	Gedaald/ gestegen (motiveer)	
Bonenstaken	Bonenstokken		Lengte: Ø:	Eenh.: Srd:	❑ ↓	❑ ↑
	Tomatenstokken		Lengte: Ø:	Eenh.: Srd:	❑ ↓	❑ ↑
Draadpalen ≤ 2.40 meter	Draadpalen ≤ 2.40 m.		Lengte: Ø:	Eenh.: Srd:	❑ ↓	❑ ↑
	Crematiepalen		Lengte: Ø:	Eenh.: Srd:	❑ ↓	❑ ↑
Draadpalen > 2.40 meter	Draadpalen > 2.40 m.		Lengte: Ø:	Eenh.: Srd:	❑ ↓	❑ ↑
Licht constructiehout	Sparrenhout		Lengte: Ø:	Eenh.: Srd:	❑ ↓	❑ ↑
	Kraaienpoten		Lengte: Ø:	Eenh.: Srd:	❑ ↓	❑ ↑
	Fuikstokken		Lengte: Ø:	Eenh.: Srd:	❑ ↓	❑ ↑
	Stuttenhout		Lengte: Ø:	Eenh.: Srd:	❑ ↓	❑ ↑
	Roerstokken		Lengte: Ø:	Eenh.: Srd:	❑ ↓	❑ ↑
Brandhout	Brandhout		Lengte: Ø:	Eenh.: Srd:	❑ ↓	❑ ↑
Houtskool	Houtskool		Lengte: Ø:	Eenh.: Srd:	❑ ↓	❑ ↑

3.A. Produceert u op ' voorraad ' en /of enkel op bestelling? En om welke hoeveelheden gaat het dan?

Kruis het juiste antwoord aan:
❑ Voornamelijk op voorraad ❑ Voornamelijk op bestelling ❑ Beide

Soort	Aantal in voorraad	Aantal op bestelling
Bonenstokken		
Tomatenstokken		
Draadpalen ≤ 2.40 m.		
Crematiepalen		
Draadpalen > 2.40 m.		
Sparrenhout		
Kraaienpoten		
Fuikstokken		
Stuttenhout		
Roerstokken		
Brandhout		
Houtskool		

3.B. waarom doet u dit?

motiveer

4.A. Hoe ziet uw klantenbestand eruit?

Kruis het juiste antwoord aan:
❑ Voornamelijk uit directe verkoop ❑ Voornamelijk uit tussenhandel ❑ Beide (directe verkoop en tussenhandel)

B. Is dit klantenbestand veranderd de afgelopen jaren?

❑ Zo Nee, (motiveer)
❑ Ja, want (motiveer)

C. Worden er door u verschillende tarieven gehanteerd voor directe verkoop en verkoop aan tussenhandel?

- ❑ Nee, (motiveer)
- ❑ Ja, (motiveer)

Zo ja, Wat is het dan het prijsverschil?

Soort	Verkoopprijs directe levering		Verkoopprijs aan tussenhandel	
Bonenstokken	Eenh.:	Srd:	Eenh.:	Srd:
Tomatenstokken	Eenh.:	Srd:	Eenh.:	Srd:
Draadpalen ≤ 2.40 m.	Eenh.:	Srd:	Eenh.:	Srd:
Crematiepalen	Eenh.:	Srd:	Eenh.:	Srd:
Draadpalen > 2.40 m.	Eenh.:	Srd:	Eenh.:	Srd:
Sparrenhout	Eenh.:	Srd:	Eenh.:	Srd:
Kraaienpoten	Eenh.:	Srd:	Eenh.:	Srd:
Fuikstokken	Eenh.:	Srd:	Eenh.:	Srd:
Stuttenhout	Eenh.:	Srd:	Eenh.:	Srd:
Roerstokken	Eenh.:	Srd:	Eenh.:	Srd:
Brandhout	Eenh.:	Srd:	Eenh.:	Srd:
Houtskool	Eenh.:	Srd:	Eenh.:	Srd:

5.A. Voor wiens rekening zijn de transportkosten van de productieplaats naar de klant?

- ❑ Meestal voor de producent, omdat:
- ❑ Meestal voor de klant, omdat:

B. Case (voorbeeld aangeven)

Stel u krijgt de vraag van iemand om: …*[standaard hoeveelheid]*… van …*[bepaald MTP]*… uit …*[plaats bos noemen]*… te kappen dat vervoerd moet worden naar …*[bepaalde plaats noemen met standaard km]*.

Hoeveel transportkosten rekent u?	SRD
Hoeveel tijd kost het u om het te kappen?	Uren
Hoeveel mensen zet u in om het te kappen?	Mensen
Welke uurloon rekent u voor uw arbeiders?	SRD

Tabel voor interviewer

Soort	Aantal in voorraad	Aantal op bestelling
Bonenstokken		
Tomatenstokken		
Draadpalen		
Crematiepalen		
Sparrenhout		
Kraaienpoten		
Fuikstokken		
Brandhout		
Houtskool		

6.Moet er volgens u retributie worden betaald op kleine houtwaren?

❑ Nee, (motiveer)
❑ Ja, (motiveer)

B. Zo ja, hoeveel SRD is dat per bos/stapel voor de verschillende producten die u produceert?

Soort	Retributie (in SRD per eenheid)	
Bonenstokken	SRD:	Eenheid:
Tomatenstokken	SRD:	Eenheid:
Draadpalen ≤ 2.40 m.	SRD:	Eenheid:
Crematiepalen	SRD:	Eenheid:
Draadpalen > 2.40 m.	SRD:	Eenheid:
Sparrenhout	SRD:	Eenheid:
Kraaienpoten	SRD:	Eenheid:
Fuikstokken	SRD:	Eenheid:
Stuttenhout	SRD:	Eenheid:
Roerstokken	SRD:	Eenheid:
Brandhout	SRD:	Eenheid:
Houtskool	SRD:	Eenheid:

C. Zo ja, door wie moeten deze kosten volgens u worden betaald?

motiveer

7. Heeft u, naast de KHW [kleine houtwaren], nog andere bronnen van inkomsten?

- ❑ Nee
- ❑ Zo ja, zoals (maak notities als interviewer in de tabel)

Kunt u in de tabel het belang (de rangorde) van deze inkomsten aangeven?

Bron van inkomsten	Belang (rangorde) 1= meest belangrijk
Productie kleine houtwaren	

C. Waarom zijn dit uw belangrijkste bronnen van inkomsten?

motiveer

D. Kunt u op onderstaande balk met pijltjes aangeven waar de pieken liggen voor uw bronnen van inkomsten?

kleine regentijd	kleine drogetijd	grote regentijd	grote drogetijd

8. Hoeveel kleine houtwaren heeft men bij u gekocht sinds het begin van dit jaar?

Soort	Aantallen sinds begin 2010
Bonenstokken	
Tomatenstokken	
Draadpalen ≤ 2.40 m.	
Crematiepalen	
Draadpalen > 2.40 m.	
Sparrenhout	
Kraaienpoten	
Fuikstokken	
Stuttenhout	
Roerstokken	
Brandhout	
Houtskool	

9. Tenslotte, welke hulp zou u nodig hebben om uw productie proces verder te verbeteren?

Hartelijk dank voor uw medewerking! Op uw verzoek krijgt u een rapport van het hele onderzoek opgestuurd (gegevens opnemen dan).

ANNEX 2: MTP students infosheet for respondents (in Dutch)

Enkele resultaten van het onderzoek naar kleine houtwaren

In het voorjaar van 2010 hebben wij in het kader van onze bosbouwstudie aan het Natuurtechnisch Instituut "NATIN" meegewerkt aan een onderzoek naar de productie en markt van kleine houtwaren. Tijdens dit onderzoek zijn een aantal interviews gehouden met producenten van deze bosproducten. Ook u heeft hieraan meegewerkt en daarmee een belangrijke bijdrage geleverd aan dit onderzoek. Wij willen u daarvoor hartelijk bedanken en u met de onderstaande informatie een indruk geven van de resultaten hiervan.

Waarom onderzoek?

Doel van dit onderzoek was om erachter te komen:

- Hoe belangrijk kleine houtwaren zijn als bron van inkomsten voor de producenten;
- Wat er allemaal in het bos gebeurt wanneer kleine houtwaren worden geproduceerd;
- Meer inzicht te krijgen in de productie van kleine houtwaren, waardoor producenten hun bossen beter kunnen beheren en uiteindelijk meer winsten eruit kunnen halen.

Wie heeft meegedaan?

De districten die we hebben bezocht om ons onderzoek te doen zijn Para, Saramacca, Marowijne en Brokopondo. Hier hebben we aan de hand van een vragenlijst in totaal 18 producenten van kleine houtwaren geinterviewd. Hieronder worden enkele soms verrassende uitkomsten van het onderzoek beschreven.

Iedereen verdient aan een walabapaal

Terwijl vaak wordt gezegd dat het juist de handelaren of wederverkopers zijn die het meeste geld verdienen aan de kleinen houtwaren, blijkt uit dit onderzoek dat de inkomsten redelijk verdeeld zijn over alle betrokkenen.

Als voorbeeld: wie verdient wat aan een walabapaal?

Een walabapaal van 2 meter kost ongeveer SRD 6,- in de stad. Deze walabapalen worden tussen de SRD 2,- tot SRD 3,- verkocht aan de handelaar. Uit de SRD 6,- die wordt gevraagd in de stad moet de handelaar nog het transport en overige kosten dekken. Deze liggen in totaal tussen de SRD 2,- tot 2,50 per paal. We kunnen dus concluderen dat de handelaar op een walabapaal van 2 meter ongeveer SRD 2, - verdient; net zoveel als de producent dus.

Wat verdient een producent per uur?

Dit is een lastige vraag. We hebben geprobeerd in kaart te brengen wat het uurloon van de producenten is. Aan de productie van walabapalen, bonenstokken en houtskool verdienen producenten gemiddeld tussen de SRD 14,- en SRD 16,- per uur. Uit dit uurloon dat ze verdienen moeten ze soms nog een kettingzaag huren om hun werkzaamheden te kunnen doen. Het geld dat ze uiteindelijk verdienen is naar eigen zeggen maar net genoeg om in hun primaire levensbehoefte te kunnen voorzien.

Hoe kosten bespaard kunnen worden?

Uit het onderzoek is ook gebleken dat de transportkosten vanuit Marowijne hoger zijn dan vanuit de andere districten. Dit ligt vooral aan de slechte gesteldheid van de wegen. Deze hoge transportkosten zouden verminderd kunnen worden door grotere hoeveelheden in één keer te transporteren, bijvoorbeeld door gebruik te maken van een flat-back-truck. Hierdoor dalen de kosten per stuk.

Een praktijk voorbeeld ter illustratie:

- Voor het transport van 1.000 bonenstokken over een afstand van 60 km zijn de transportkosten per stok SRD 0,35.

- Voor het transporteren van 25.000 bonenstokken over dezelfde afstand zijn de kosten per stok ongeveer tien keer zo laag, namelijk SRD 0,03.

Andere tips

Voor een betere en soepelere stroom van de vraag naar en het aanbod van de kleine houtwaren is het maken van goede afspraken tussen de producenten, dorpskapiteins en opkopers van groot belang. Dit geldt niet alleen voor het maken en vastleggen van prijsafspraken, maar ook afspraken over het betalen van de retributie en de transportkosten.

Daarnaast is het verstandig om de Stichting voor Bosbeheer en Bostoezicht (SBB) al in een vroeg stadium te betrekken bij de productie van en handel in kleine houtwaren. Betere regulering van afspraken is uiteindelijk in ieders voordeel.

Tot slot

..... bedanken wij nogmaals alle producenten en/of handelaren van kleine houtwaren in de districten Para, Saramacca Marowijne en Brokopondo voor hun spontane medewerking!

De NATIN Studenten;
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Paramaribo, oktober 2010

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