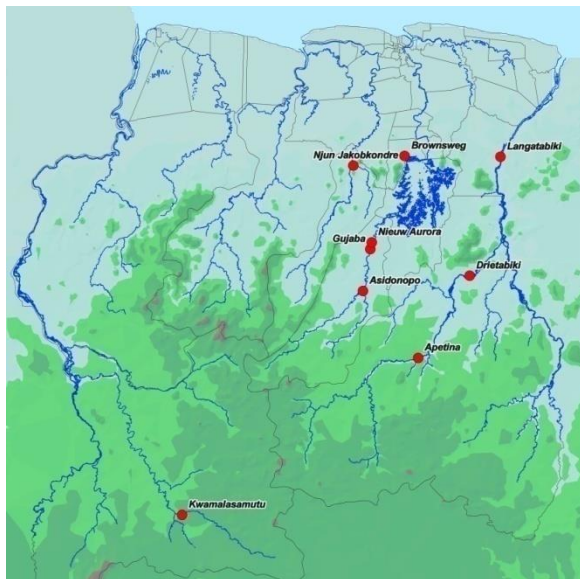


Traditional and non-traditional aspects of livelihoods in Maroon and Indigenous communities in Suriname

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Abstract: This paper is based on a Household Survey which was done in 2009 in nine Maroon and Indigenous communities in the hinterland of Suriname. Questions were asked about demography, economic aspects, social aspects, health, material support, and local governance. Based on the results comparisons are made between the different communities. This is done for the adherence to more traditional lifestyles and livelihoods, but also for non-traditional forms. In the end communities are ranked in several ways from "traditional" to "modern" and explanations are given for their positioning.

One of the interesting questions these days for tribal communities is to what extent they still are "traditional" or whether they have become "modern". The terms traditional and modern are not defined, since these often depend on the context and ideology. Instead a pragmatic approach to this question is taken. For this purpose the results of a Household Survey that was done in June through August 2009 are used. Overall 601 individual households were interviewed in seven Maroon communities and two Amerindian communities in the hinterland of Suriname (see map for locations).² The results are very useful to compare communities with each other.



Map of Suriname with 9 communities

1. Kwamalasamutu is the largest Trio village and residence of the tribal chief.
2. Apetina is the largest Wajana village and residence of the tribal chief.
3. Drietabiki is the residence of the chief of the N'djuka tribe.
4. Langatabiki is the residence of the chief of the Paramaka tribe.
5. Njun Jakobkondre is the main residential village of the Matawai tribe.
6. Asidonopo is the residence of the chief of the Saramaka tribe.
7. Gujaba is the largest Saramaka village.
8. Nieuw Aurora is a Christian Saramaka village.
9. Brownsweg is the largest Maroon community in district Brokopondo (transmigration village).

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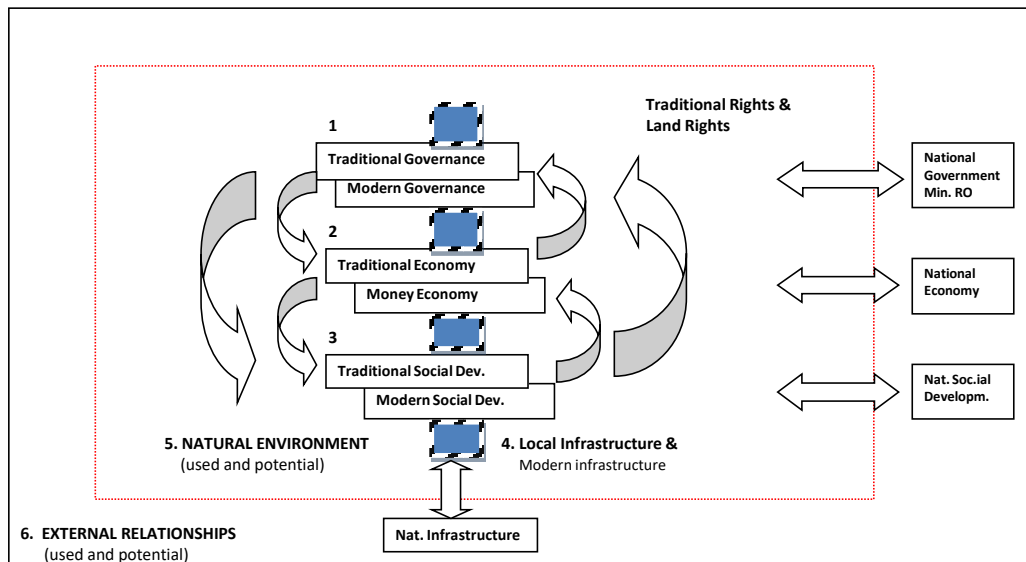
² The detailed results are found in the report by Marten Schalkwijk "Resultaten huishoud enquête in negen binnenlandse gemeenschappen 2009", November 2009. This is part of the project "Development Planning" which was implemented by Suriname International Partners (SIP), commissioned by the Ministry of Regional Development, financed by the Inter American Development Bank. See also SIP "Draft Report Community Assessment and Community Planning", November 2009.

The average household size was 3,7 but this varied across the communities. In Kwamalasemutu the average household size was 2,6 while this was 4,5 in Langatabiki. The sex ratio (women : men) varied as well with 1,0 in Apetina and Langatabiki being the lowest and 1,8 in Asidonopo being the highest.

Model of relationships within a Tribal Community

The Household Survey was part of a larger project to develop the main elements for a Development Plan for the Interior. We worked with a model where we distinguished between the traditional aspects of tribal communities and the modern aspects. In the model six elements of a tribal community are highlighted i.e. the governance structure, the economy, the social dimension, the infrastructure, the natural environment, and external relationships.³ In an isolated situation each of these elements is made up completely of traditional aspects, which can be seen as a 100% traditional tribal community. In a non-isolated situation, however, there will be interaction with external communities and people and some elements may change. Often not everything changes, although if a tribal community is completely absorbed by a surrounding urban community most things may change and just a few traditional elements remain.

Basic Model of Relationships within a Tribal Community



Most assessments in the Interior are done at the level of the community or village and sometimes the tribe. In the project on Development Planning we worked at three levels i.e. the national level (assessment of literature and projects), at the community level (community consultation) and at the individual level (household survey). In this way we got a picture of the situation that was enlarged at every lower level, but at the same time the household survey made it possible to measure things that are often only indicated at the community level, but difficult to quantify.

³ This model was developed by the partner Culturecom (notably anthropologist Chris Healy) in the project.

Use of the forest

In the survey questions have been asked about the use of the environment and livelihoods. The answers give us a perspective from the household and individual level. For instance about 80% of the households found the forest “very important” for the community. We asked an open question what the person used from the forest and clustered the answers in seven types of use i.e.:

1. Fruits of the forest: for sale (e.g. awarra and nuts), for consumption, as source for other products (e.g. to produce edible oil).⁴
2. Animals and game: hunting and trading of valuable animals.
3. Herbs and plants: primarily used to prepare medicine.
4. Seeds and vines (lianas): used mainly for utensils (e.g. brooms, matapi) and craft (e.g. seeds for necklaces)⁵.
5. Timber: mainly for building material and furniture.
6. Leaves: primarily as roofing material.
7. Dead wood: mainly for cooking purposes.

Table 1: Use of the forest by nine communities

Community	Specific use of the forest mentioned							Intensity
	<i>Food Forest fruit</i>	<i>Cooking Firewood</i>	<i>Roofing material Leaves</i>	<i>Food Game and animals</i>	<i>Building material Furniture timber</i>	<i>Medicine Herbs and plants</i>	<i>Craft and utensils</i>	At least two types of use of the forest mentioned
Kwamalasamutu	73%	20%	20%	16%	22%	9%	29%	56%
Apetina	93%	41%	4%	74%	11%	4%	11%	81%
Brownsveg	23%	1%	20%	0%	5%	11%	1%	15%
Asidonopo ⁶	96%	0%	0%	0%	1%	0%	0%	1%
Drietabiki	37%	9%	0%	6%	1%	1%	0%	8%
Nw Jacobkondre	67%	3%	0%	14%	0%	3%	0%	17%
Langatabiki	70%	20%	40%	20%	35%	5%	0%	65%
Guyaba	81%	39%	34%	6%	9%	11%	0%	66%
Nw Aurora	95%	62%	35%	1%	7%	15%	0%	72%
Average	71%	22%	17%	15%	10%	7%	3%	42%

Although the forest is seen as very important by all communities the use of the forest varies as we can see from table 1. The widest use is for food, especially forest fruits (mentioned by 71% of the households). But this use is lowest in Brownsveg, where most villages are transmigration villages where people had to change their lifestyles after resettlement in 1964 due to the building of a hydro-electric dam. There was less access to surrounding forest since Brownsveg was not located on a river or lake and people could not move so easy as before. Over the past years Brownsveg has become a center for

⁴ Known as tucumã-do-Pará in Brasil, aouara in French Guyane, and *Astrocaryum vulgare* as a general classification.

⁵ The matapi is an Amerindian cassava strainer or sieve shaped as a cylinder.

⁶ The distribution of answers for Asidonopo is somewhat strange, because from observation many other uses of the forest could be established. Most probably the interviewers limited their answers to the first one or so. In Drietabiki the use of the forest was also fairly low, but here the fact that Drietabiki is situated on an island with less forest in the vicinity may be the main reason for this.

small gold miners, who work in the vicinity. In fact we can state that in general people in Brownsweg have gradually developed a different lifestyle, even though they still live in a tribal setting. Use of the forest is a main feature of a traditional tribal lifestyle and we see that most communities still expressed its importance for their way of life.

Agriculture, fishing and hunting

Another main feature of a traditional tribal lifestyle is the growth of one's own food by means of an agricultural plot. This provides food security and in many cases is the main source of natural income as well. In table 2 we have a lot of interesting information on the state of the subsistence agriculture and traditional relations. We see that on average 23% of the households in the nine communities did not have an agricultural plot anymore, including more than half of the households in Brownsweg and Nieuw Jacobkondre. The status of Brownsweg was described already and this fact only underlines it. Nieuw Jacobkondre lies in the vicinity of a gold mining area and it seems that people earned more with gold mining and did not need the crops from a subsistence plot; also many people live in Paramaribo and travel between their village and the city and thus do not seem to have the time or need for a plot. On the other hand we see that in the two Amerindian villages that are quite isolated nearly everyone still has an agricultural plot. In fact on average 28% of all households in the nine communities even had more than one plot, which indicates the importance of agriculture and subsistence strategies in many of these communities.

Table 2: Person responsible for cutting open the agricultural plot

Who cut open the agricultural plot last time?					
Community	Male	Family and relatives	Other	Does not have a plot	Total
Kwamalasamutu	39%	55%	6%	0%	100%
Apetina	44%	48%	4%	4%	100%
Brownsweg	23%	7%	10%	60%	100%
Asidonopo	26%	45%	10%	19%	100%
Drietabiki	46%	22%	12%	20%	100%
Nw Jacobkondre	32%	7%	10%	51%	100%
Langatabiki	60%	5%	15%	20%	100%
Guyaba	56%	24%	6%	14%	100%
Nw Aurora	49%	17%	18%	16%	100%
Total	41%	27%	10%	23%	100%

Among the Amerindians clearing a plot is a joint family responsibility and we see that this is reflected in the data from Kwamalasemutu and Apetina where either the male or the family did this job. In Traditional Maroon society the male is responsible for cutting open a new agricultural plot. Especially in Asidonopo it seemed that males did not perform their duty, but this had to do with the lack of males in this community (as we saw earlier with a sex ratio of 1,8) due to labor migration. In the other Maroon communities between 57% and 75% of the males still were reported to clear the plot for the women.⁷ This traditional division of labor is changing however and we see more women and other relatives

⁷ If we exclude those without a plot than even in Brownsweg 58% of the remaining plots were cleared by the male.

clearing the plot themselves. There is a growing percentage of plots that are being cleared by non-family members and paid laborers. This is more than 20% of the plots in Brownsweg, Nieuw Jacobkondre and Nieuw Aurora and nearly 19% in Langatabiki.⁸ Langatabiki is also located near a gold mining area.

Two thirds of those who practiced agriculture consumes most of their own produce (self sufficiency), while the other third was selling at least some of the products. Apetina had the highest level of self-sufficiency (96% own consumption), followed by Drietabiki (82%) and Guyaba (75%). On the other side Langatabiki had a high degree of market orientation, because 75% was being sold at least partially. Most of the products were sold outside the village. Brownsweg also had a high degree of market orientation with 59%, but here most products were sold within the community.

About half of the households did some fishing. The population of Brownsweg was not fishing much (only 19%), mainly because it is not situated along a river or creek. In Nieuw Aurora also less people fished (35%). In all other communities at least half of the households were involved in fishing, with the highest percentages for Apetina (85%), Langatabiki (85%), Kwamalasemutu (80%) and Nieuw Jakobkondre (75%). Most fish, however, is consumed by the households themselves and fishing often is done by angling.⁹

Only a third of the households indicated that someone was hunting, and sometimes only infrequent. Hunting in most communities has become a minor economic activity, especially in Brownsweg, Nieuw Aurora and Asidonopo. Only in Kwamalasemutu it is still an important part of the village economy. There were hardly any professional hunters in the different communities.

Analysis of livelihoods

With the analysis of the use of the forest and agriculture we have in fact already started to focus on the Economic sphere of the basic model of relationships in a tribal community. In the model we see that there is a Traditional Economic structure i.e. the Subsistence Economy, but this coexists and interacts with a modern economic structure. Thus some people earn income from regular type of work e.g. as employees of Government and other agencies (e.g. teachers, nurses) or operate their own small business. This Local Economy interacts with the National Economy in different ways such as exporting their products outside the community. In many tribal communities external influences seem very pervasive in the economic realm, especially when people see themselves as being poor. We will therefore focus more on this aspect and see how the nine communities do on different indicators. The main tension between the traditional economy and the modern economy comes from the need of the local population to earn money to buy necessary goods and probably some luxury goods as well. A pure subsistence type of livelihood cannot provide this.

Trade, services and employment

In the interior communities on average 8% of the households was involved in trade activities. Most shops were found in the villages of Nieuw Jakobkondre, Brownsweg, Asidonopo and Guyaba. This seems to be related to a higher circulation of money in these areas (especially Brownsweg and Nieuw Jakobkondre) and a larger population density (Guyaba and Asidonopo with neighboring villages).

⁸ These percentages are calculated for those who still had a plot; Brownsweg was highest with 24%.

⁹ Of 59 persons we only knew that they were fishing, but not what they did with the fish they caught. The indications from the explanatory questions was such that it was clear that it was primarily for their own consumption.

In 3% of the households people were involved in trade in animals, with the largest concentration in Kwamalasemutu. Trading involved singing birds, macaws, parakeets and in some cases monkeys, rare frogs and snakes.

On average 13% of the households in the communities had someone who was working in services. The service providers were relatively more visible in Apetina (33% mostly tourism), Nieuw Jacobkondre (22% mostly transport) and Langatabiki (20% mostly transport).

A quarter of the households had at least one member who worked for a salary. The distribution by type of employer indicates that the government was the largest employer in the Interior, because an average of 47% of those employed worked in some government agency. The Ministry of Regional Development was the main employer within the Government in the interior, followed by the Ministry of Transport, Communication and Tourism (notably the aviation department). This increased to 64% of all those working for a salary if we add the teachers (public schools) and others working for semi-public organizations. The Traditional authorities (*granmans*, captains, *basjas*) also received a compensation from the government, although they are not employees. Together the government was responsible directly or indirectly for the salaries of 79% of all those who earned a regular monthly salary or allowance in or around the village. In Asidonopo, Drietabiki and Nieuw Aurora this was even 90% or higher.

The private sector is not a main employer in the interior, but it provides substantial employment in Brownsweg. NGO's –notably the Medical Mission, the Moravian and Catholic schools, and Amazone Conservation Team- were also employers in certain villages. In Kwamalasemutu and Apetina some NGO's were important employers.

In addition to those who earned a salary in the vicinity of the village it turned out that 19% of the households also had someone who was earning a living away from the village. The highest percentages were found in Brownsweg, Nieuw Jacobkondre and Langatabiki and the lowest in Nieuw Aurora, Guyaba, Asidonopo, and Apetina. The gold sector was the most attractive sector for these migrant workers, followed by the timber sector.

Traditional products

About two thirds of the households processed at least part of their agricultural harvest. In Apetina and Kwamalasemutu the processing was even above 90%, while in Brownsweg and Nieuw Jacobkondre it was below 50%. Cassave was the most favorite product to be processed, especially into cassava bread and *kwak* (tapioca). The processed food products were processed mainly for own consumption (71% of the households) and less for the market.

The question was asked whether the women were making other products as well. It turned out that an average of 55% of the women was producing other items. This was higher in the Indigenous villages (Apetina 96% and Kwamalasemutu 71%) and lowest in Drietabiki (33%), Langatabiki (35%) and Nieuw Aurora (38%). The following products were made: *pangi's* (women clothes), embroideries, needlework, dishcloths, working with textile (especially in the Maroon villages), slings, hammocks, ornaments (especially in the Indigenous villages), and crafts.

The males in 39% of the households were also producing all kinds of items. Again the men in the Indigenous villages were more active in this area (Apetina 89% and Kwamalasemutu 67%). The communities that were the least active were Asidonopo (10%) and Brownsweg (12%). The products that

were produced by the males were: construction of houses/huts/kitchens, sawing of planks from a tree, building canoes, making furniture, utensils and tools (paddles, bow and arrow, strainers, etc) and craft (woodcarving, basketwork). Most items, however, were produced for the own household and only a limited amount was sold.

Monetary income

In 78% of the households in the nine communities people have a certain amount of money income, while 22% said that they had no monetary income. If we add the lowest income bracket (those who earned less than U\$ 178 per month) to those who had no income, we may call this the poorest group in the communities. This meant that on average 57% of the communities were quite poor. That percentage was substantial higher (between 70% and 85%), however, in the villages of Kwamalasemutu, Apetina, Asidonopo, Guyaba and Nieuw Aurora. On the other hand Langatabiki and Brownsweg had higher incomes (only 20% to 25% was very poor).

About 56% of the households received some social benefit or allowance (AOV, child benefits, handicapped allowance, poverty allowance) from the Government, but 80% of these allowances were meager (less than 500 SRD per month). For many of the elderly their AOV (Suriname's general old age pension) was the only income they had. The distribution of government allowances varied substantially among the villages; in some communities only 20% of the people received an allowance and in others up to 90%.

Remittances from abroad were not an important source of income (on average only 6%) for the households, which also had to do with a limited number of relatives that had migrated to a foreign country. Those who received some money from abroad got it from their partner, child(ren), sibling, or another relative.¹⁰ In addition 31% of the households said that they occasionally received money or goods from other people in Suriname.

Based on all sources of income we have come up with a general estimate of the income per household (table 3). The table shows that 12% of the households had no monetary income at all (i.e. pure subsistence), which is probably inflated by the less reliable information about Apetina.¹¹ We also see that according to this method an estimated 30% of the households earned more than U\$ 358 per month or more than U\$ 12 per day, which is a reasonable income in a community where one usually pays no monthly rent for housing and probably nothing for utilities. On the other hand we have to be careful with these estimates, because we have included all members of the household, including the migrant workers who may also have expenses in the city or where they work. We also have not taken into account the size of the household.

¹⁰ In 40% of all cases, however, it was not reported who send the remittance; in 10% of the cases the source was not a person but for instance the French Government.

¹¹ The data from Apetina seem very improbable in view of the overall picture; if we exclude Apetina then the average for the category without any income drops to only 6%. People in Apetina may not have been willing to provide information about their income (especially to local interviewers). This lack of reliable information on income is a general problem in Suriname and makes it very difficult to get a sound picture on income distribution. Nevertheless we believe that our approach of working with all pieces of information on the economy of the household provides a reasonable estimate of the actual situation.

Table 3: Estimate of monthly income per household in the different communities

Community	Estimated average income per month of the household based on several indicators					
	none	1-499 SRD (U\$ 1-178)	500-999 SRD (U\$ 179-357)	1000-1499 SRD (U\$ 358-535)	1500 SRD or more (> U\$ 535)	Total
Kwamalasamutu	4%	42%	32%	8%	15%	100% (N=53)
Apetina	62%	12%	15%	8%	4%	100% (N=26)
Brownsveg	5%	11%	38%	26%	20%	100% (N=89)
Asidonopo	0%	27%	41%	23%	10%	100% (N=83)
Drietabiki	29%	15%	22%	22%	12%	100% (N=94)
Nw Jacobkondre	0%	11%	58%	11%	19%	100% (N=36)
Langatabiki	0%	10%	35%	25%	30%	100% (N=20)
Guyaba	6%	40%	36%	12%	6%	100% (N=109)
Nw Aurora	0%	12%	69%	11%	8%	100% (N=74)
Average	12%	20%	39%	16%	14%	100% (N=584)

Besides income, households also have expenses and we asked the question on which three items people spend their money. Food proved to be the most important expense item (primary expense), followed by expenses for running the household (secondary expense). At some distance we then have expenses for clothing, transport and a variety of other expenses (tertiary expenses).

Table 4: Average Production and consumption goods in nine communities

Information was collected from seven different questions in the questionnaire			
Community	Productive property (points)	Consumption goods (points)	Total property (total points)
Kwamalasamutu	3,0	2,1	5,1
Apetina	3,9	3,4	7,3
Brownsveg	0,9	6,8	7,7
Asidonopo	1,1	0,9	2,0
Drietabiki	0,9	3,0	3,9
Nw Jacobkondre	2,3	3,1	5,4
Langatabiki	3,6	8,3	11,9
Guyaba	1,8	2,5	4,3
Nw Aurora	1,2	3,1	4,3
Average	2,1	3,7	5,8

Property and socio-economic status

Questions were asked about property and a variety of production goods (e.g. cassava mill, chain saw, bus, etc.) and consumer goods (e.g. fridge, solar panel, television, boat, modern house, etc.) that people owned. We used this to give people a property score. The maximum score for productive items was 35 points i.e. if someone owned everything that could be owned on the list. In practice nobody would possess all items, because normally you would only buy what you needed in your own line of work. In

reality no household scored more than 14 points. Likewise for consumer goods the maximum score was 28 points, but in reality the highest score was 15 points.

The result of this method to calculate property is seen in table 4. The villagers of Langatabiki own most property (average of 12 points), followed by Brownsweg (8 points) and somewhat surprising by Apetina (7 points). These three communities scored substantial higher than the others. If we inspect the scores, however, we see that people in Langatabiki and Brownsweg primarily owned consumer goods, while in Apetina people owned more production goods. The poorest community is Asidonopo and surrounding villages (only 2 points). Drietabiki, Guyaba and Nieuw Aurora also had a low score, but this was still twice that of Asidonopo. The villages on the Upper Suriname River thus seem to be poorer than the other communities in terms of accumulated property. This is not surprising, because there seem to be less opportunities for paid employment along the upper Suriname River e.g. it is not considered a gold mining area such as the Marowijne River.

Table 5: Socio-economic status in nine communities

Community	Socio-economic status (SES) based on ownership of property				Total
	low SES (underclass, 0-1)	lower middle SES (lower class, 2-5)	higher middle SES (middle class, 6-10 points)	high SES (higher class, 11 plus)	
Kwamalasamutu	18%	46%	24%	13%	100% (N=55)
Apetina	4%	52%	19%	26%	100% (N=27)
Brownsweg	5%	26%	44%	26%	100% (N=94)
Asidonopo	54%	39%	5%	2%	100% (N=83)
Drietabiki	20%	51%	28%	1%	100% (N=102)
Nw Jacobkondre	31%	28%	25%	17%	100% (N=36)
Langatabiki	5%	10%	20%	65%	100% (N=20)
Guyaba	38%	28%	24%	10%	100% (N=110)
Nw Aurora	32%	34%	27%	7%	100% (N=74)
Total	23%	35%	27%	18%	100% (N=601)

Within each community property will vary i.e. there are people who do not own anything, while others own many things. Although people often think that all tribal people in the interior are poor there are differences within communities and between communities. To get an idea of these differences we clustered the level of property into four categories, which we can equate with the “socio-economic status” of the household. Those with (hardly) any property were classified as the underclass (maximum 1 point in property). The next category had a low property score of 2 to 5 points and could be seen as the lower class. Households with a property score of 6 to 10 points were labeled middle class, while those with most property (11 points or more) were labeled the higher class. This is a very first attempt to classify the population of the Interior according to socio-economic status and it clearly will trigger further discussions on the proper categories and labels.¹²

¹² This term is not accurate, since it is mainly the economic dimension that is incorporated and not so much the social dimension. It is therefore a working term that needs to be enhanced. On the other hand calculating ‘property’ is already more than income, because it also reflects the capacity of the household to save money and buy things. Very poor people may not be

The result of this attempt is provided in table 5. According to this classification scheme we can conclude that nearly one quarter (23%) of the population belongs to the underclass, while the richest group consists of 18% of the households. The differences also show up and Langatabiki could be classified as the “richest” community (65% of the households had a score of 11 property points or more), while Asidonopo and Drietabiki had the fewest “rich” households (only 1% to 2% own a lot of property). Moreover Asidonopo was the “poorest” community (54% underclass), while Apetina, Brownsweg and Langatabiki had the smallest groups of “poor” households (4% to 5%).

Traditional and non-traditional livelihoods

If we look at the total economic picture of the communities we can assess the ratio between people who are working in the traditional economy and those working in the modern economy. This information was collected from a question about the composition of the household and all its members. If the ratio is higher than 1,0 than the traditional economy dominates in the community, while with a ratio lower than 1,0 the modern economy dominates. The last column in table 6 demonstrates that the modern economy is dominant in Brownsweg and to a lesser extent in Langatabiki and Nieuw Jacobkondre. In all other communities the traditional economy had the upper hand, but especially in Guyaba, Nieuw Aurora, Apetina and Asidonopo.

Table 6: Comparison of communities by type of employment

Community	Economic status of members of the household		
	average number of persons per household involved in the traditional economy	average number of persons per household involved in the modern economy	Ratio between Traditional and Modern economy
Kwamalasamutu	1,5	0,9	1,7
Apetina	2,6	1,1	2,4
Brownsweg	0,5	1,1	0,5
Asidonopo	1,7	0,8	2,2
Drietabiki	1,3	0,8	1,8
Nw Jacobkondre	1.1	1,3	0,8
Langatabiki	0,8	1,1	0,8
Guyaba	1,6	0,6	2,8
Nw Aurora	1,4	0,6	2,4
Average	1,4	0,9	1,7

Note: This table is based on information of persons between 15 and 60 years in each household.

Because of the average ratio of 1,7 we can conclude that in the interior of Suriname and especially in district Sipaliwini the traditional economy is still the dominant economy. This means that income from nature i.e. from agricultural products, fishing, hunting, traditional male and female products for own

able to save much, while people who are better off may spend all their income on non-durable goods. Thus durable goods can be seen as an investment that may outlive a particular income level.

consumption, are the main sources of income. Monetary income through the sale of products, income from trade, services provided, salaries or entrepreneurship, however, have become more important as well. Money is needed to buy a variety of goods that a subsistence economy cannot provide.

Table 7: Communities in the Interior by economic type

community	Most modern ranking	Least traditional ranking	Ranking by ratio of modern to traditional employment^a	total score	overall ranking
Brownsweg	1	1	1	3	1
Nw Jacobkondre	2	4	2	8	2
Langatabiki	3	7	2	12	3
Asidonopo	4	3	6	13	4
Nw Aurora	6	2	7	15	5
Kwamalasemutu	5	8	4	17	6
Drietabiki	9	5	5	19	7
Guyaba	8	6	9	23	8
Apetina	7	9	7	23	8

a) The ranking was made such that the scores could be added, thus the list in table 6 was switched.

Apart from the method used above we can also use the data that have been presented so far to decide on the type of economy in the interior. The importance of the forest, the fact if one has an agricultural plot, the extent to which fishing and hunting are practiced, and the production of traditional products by males and females are all indicators of the presence of the traditional economy. We can compare the communities with each other in terms of the presence of each of these six aspects of the traditional economy and rank them from most traditional to least traditional. For instance the community where most households still have a slash-and-burn type of agricultural plot is most traditional and the community with a minimum of such plots is least traditional. If we add these up we get an overall score and rank (second column in table 7).¹³

Likewise we can look at the presence of trade, services, people being employed in a modern job, people working outside the village, the level in which products are being sold in the market, and the level of allowances from the Government. On these six variables which are indicators of modernity we rank the communities from most modern to least modern. If we add them all up and rank them we get the first column in table 7.

In addition we have also used the information in table 4 to rank the communities from modern to traditional (third column in table 7). We can now add all columns and arrive at a total score (fourth column in table 7), which we then use for a final ranking (last column).

¹³ We have switched the label here from 'most traditional' to 'least traditional' for reasons of overall computation.

The analysis clearly shows that Brownsweg can be labeled the most economically modern of all nine communities. On each of the three different lists Brownsweg scores best (3 points): it is the most modern on the modernity indicators, the least traditional on traditional indicators, and has the best ratio of modern employment to traditional employment. Nieuw Jacobkondre follows at some distance (8 points), but is clearly second compared to the other communities. Langatabiki is third (12 points), but the difference with the next two communities is small (Asidonopo 13 points and Nieuw Aurora 15 points). Guyaba and Apetina have the most traditional economies (with 23 points each). Drietabiki and Kwamalasemutu are also fairly traditional. Brownsweg, Nieuw Jacobkondre and Langatabiki are all involved in gold mining activities, but are also the places that are closest to the capital city Paramaribo. They also had a dominant Christian influence. In that sense their position as more modern than the other communities is not surprising. Likewise Kwamalasemutu and Apetina are seen as very traditional Amerindian societies that are located very far from the capital with limited connections. Normally the villages along the Upper Suriname River (Nieuw Aurora, Guyaba, Asidonopo), are also seen as more traditional than those below the Brokopondo lake. In fact the villages that are higher up on the River such as Asidonopo are often seen as more traditional than those that are less far away (Nieuw Aurora). Furthermore Asidonopo, Guyaba and Drietabiki are dominated by tribal religion, which make people label them as more traditional. Thus the position of Asidonopo was to be expected as more traditional than that of Nieuw Aurora. The very dependent position of Asidonopo on outside assistance and a skewed sex ratio seems to have influenced their positioning in a peculiar way. On the other hand we should keep in mind that we assessed mainly the economic aspects of these communities and not the social aspects.

Conclusion

In this paper a method was developed to compare tribal communities with each other on different variables that could serve as indicators of a more modern or a more traditional livelihood. In the end the indicators that were used complementary to each other were robust enough to align the communities along a scale from modern to traditional.

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