

1 STAR+ Yamaha & Datsun Suriname's Authorized Service Workshops: A Micro-Franchising Experience

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Background

Birth of the organization

Datsun Suriname NV was founded in 1968 by Cyril V. Jong Tjien Fa, to exercise the exclusive commercial representation of Datsun (the brand used by Japanese company Nissan in export markets between 1958 and 1986) in Suriname. During its 50 years of existence the company has been run as a family business and currently its CEO is Mr. Michael P. Jong Tjien Fa, the founder's son, and its Director is Mrs. Kelly Jong Tjien Fa, the founder's daughter-in-law. In 2012 the company founded the *Stichting Binnenland Technische Ontwikkeling* or Suriname Hinterland Technical Training & Development Foundation to finance micro-finance and micro-franchise activities in the country.

Main objective of the organization

Datsun Suriname NV's main objective is to provide transportation to the interior communities of Suriname which, as will be described further in this document, rely on boats as their major mode of transportation. To this end, the company distributes Yamaha outboard engines and generators and also provides commercial representation for Nissan in the country.

Product portfolio and market presence

Datsun Suriname NV sells Nissan vehicles (cars, SUVs, vans and buses) and Yamaha outboard engines (2-stroke, 4-stroke and Enduro lines, with an 84% national market share for outboard engines), electricity generators and inverters (60% market share), water pumps (13% market share), All-Terrain Vehicles (8% market share) and chainsaws.

Although Yamaha is largely dominant in the outboard engine market, second place is usually held by Tohatsu or Suzuki at a 10% or lower market share, depending on the region. Other competing brands are Evinrude, Force, Hi Fong, Honda, Johnson, Mariner, Mercury and Parsun.

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Current situation

National and international context

With a total land mass of 156,000 square kilometers (60,000 square miles), Suriname is the smallest independent country in South America. Ninety percent (90%) of its population of around 560,000 people (2016 estimate) is concentrated in the northern, coastal region (mainly in the country's capital of Paramaribo and in cities such as Albina and Saramacca) while the rest is dispersed throughout the tropical rainforest which comprises about eighty percent (80%) of the country's landmass.

Natural rainforest conditions determine that the region is prone to floods and the road network is hard to maintain, which makes the rivers the main route of transportation and commerce between the cities and the interior lands, where most economic activity takes place. The country is crisscrossed by the tributaries of seven main rivers: Marowijne, Suriname, Saramacca, Coppename, Nickerie, Corantijn and Coeroeni (a map is provided on page 5 of this document). Economic activity revolves around mining (mainly bauxite, gold and petroleum), agriculture products (such as bananas and rice) and tourism (thanks to its tropical landscapes).

Most communities in the interior are located along the rivers and usually live in extreme poverty, with little to no access to public services such as sewage, health and education (in 2012, only 51% of boys and 61% of girls ever enrolled in secondary school). Electricity in interior villages is commonly provided by generators² (94% of Datsun Suriname's small generators are in the Southern, sparsely populated district of Sipaliwini). Water streams surrounding mining communities are usually poisoned with lead and mercury, which causes health problems. Schools and hospitals are also scarce in the interior, which explains high levels of illiteracy and high levels of youth migration to the cities.

Only the coastal area (which comprises 20% of the territory) is accessible by car - the rest is only accessible by plane or boat. Servicing outboard engines for aquatic transportation is thus critical for the interior economies, as it is necessary to go to school or medical clinics, to reach markets and to move people and goods.

Preference for certain types of engine varies according to local conditions. In the border region with French Guyana, for example, 4-stroke engines are much more prevalent than in the rest of the country, as European Union regulation (which applies to French Guyana) forbids 2-stroke engines. A nation-wide government ban on 2-stroke engines is expected in the coming years due to emissions issues.

Low income levels, economic contraction

Due to the importance of mining activity, both individual and national incomes are very vulnerable to external price shocks. The 2013 commodity price fall hit the Surinamese

² Republic of Suriname (2016) *Second National Communication to the United Nations Framework Convention on Climate Change*. p.62.

economy very hard, causing GDP stagnation in 2014 and an accumulated contraction of - 9.8% in the 2015-2017 period³. This contraction was met with a devaluation of the Surinamese Dollar (SRD) from 3.35 SRD/USD in 2011 to 7.58 SRD/USD in 2018.

Although determining income levels is hard as many people don't register their income or don't have stable jobs, wages in the interior are low but very variable depending on the local economic profile. The minimum wage in Suriname is 4 SRD (about 50 cents USD in August 2018⁴) an hour, which amounts to less than 100 USD a month. However, boat operators can make that amount in one day of work, especially near the border with French Guyana where payments are made in Euros and the exchange rate can be taken advantage of to purchase goods.

Financial conditions are particularly hard for Suriname's commercial fishery sector, as it has to deal with high costs caused by import duties on fish and other animals (which are waived by the government in neighboring Guyana) and high fuel prices (which Suriname's government subsidizes only for the taxi sector). For this sector, Datsun Suriname provides financing so that engines and generators can be paid over a period of two to three years.

Political context: independence, dictatorship and violence, rebuilding communities

A Dutch colony from the mid-17th century, Suriname's independence was granted in 1975 after two years of negotiations that saw roughly a third of the country's population (mainly but not exclusively ethnic Dutch and their descendants) emigrating to the Netherlands. A series of violent episodes in the 1980s hit the interior especially hard, resulting in the destruction of villages and roads.

The *Stichting Fonds Ontwikkeling Binnenland* (SFOB), the public partner of this initiative, was created in 2003 by the Surinamese government to help develop the interior after decades of neglect following the armed conflict. The SFOB now has 15 years of experience interacting with the interior communities and providing help installing water units, communication equipment and power generators. Staffed by 12 people at the time of our research, the SFOB is the main public entity responsible for coordinating efforts to improve the living conditions of the interior communities and has in-house translators who can speak the interior languages. In the ASW Project, the SFOB is tasked with fiduciary management, coordination, financial and technical reporting - it holds the project's funds and makes disbursements in accordance with the schedule of activities and the IDB's policies and procedures.

Why did the company decide to develop an Inclusive Distribution Network?

Expensive and time-consuming process for buying and installing engines and parts

Yamaha headquarters in Japan were worried about some of the market trends in Suriname. While outboard engine sales were good (700 to 1000 yearly sales, rivaling those of Sri Lanka - a country with a population more than 36 times higher than Suriname), numbers indicated that the engines had a very short lifespan and that this was not being extended through

³ Suriname GDP statistics at tradingeconomics.com, viewed on August 22nd, 2018.

⁴ Source: Exchange rate of 7.52 SRD/USD published by the Suriname Central Bank website (www.cbvs.sr) viewed on August 22nd, 2018.

repairs and services, but instead many clients opted to throw away their damaged engines and purchase new ones. Engine failure was usually caused by lower body damage due to hitting rocks while navigating the rapids, more frequent during the dry season as riverbeds become shallower and require better navigation skills.

Purchasing a new engine usually involved a risky process: the client had to travel to Paramaribo to buy the engine (which usually weighs more than 200 Kg) and come back to his/her village to have a local workshop install it. It was not uncommon for problems to arise during installation that required the client to go back to Paramaribo, this time carrying a malfunctioning engine. Replacing parts was not much easier: usually the workshop owner would list the part that was required for the owner to look for in Paramaribo and bring back - only to find that the piece was out of stock, discontinued due to outdated catalogs or did not exist.

Identifying an opportunity to extend the life of its engines and reduce the amount of waste in the interior communities, Yamaha's Corporate Social Responsibility (CSR) department approached Datsun Suriname with the idea of replicating an Authorized Service Workshop (ASW) experience that had been implemented in the Indian market. The main idea was to train satellite shops in the interior to service Yamaha engines reliably and efficiently, while strengthening the entrepreneurial skills of the local population.

Since implementing the ASW model would require an extraordinary investment, Datsun Suriname approached the Inter-American Development Bank (IADB) to explore the possibility of collaborating in a project. With support from the IADB's Multilateral Investment Fund (MIF), the plan was re-conceptualized as a micro franchise initiative designed to create, train and coordinate a network of local workshops in interior communities, with a sub-network of satellite shops along the riverbeds to repair and service Yamaha engines.

Contraband and grey markets

Yamaha engines can command a price premium over their competitors (mainly Tohatsu and Suzuki along with other American and Chinese brands, as indicated elsewhere in this document), as they usually last longer. In border regions (with Guyana in the West and French Guyana in the East) contraband is especially prevalent, as Yamaha parts are compatible with cheaper grey-market engines that fail almost three times more often. The post-2013 economic contraction made the situation more evident: Datsun Suriname detected an increase in grey-market engines and parts during service campaigns in 2013 and 2014 in interior villages, which suggested the importance of strengthening the brand's presence.

Implementation partners

After a design period, it was agreed that SFOB would act as Executing Agency for project coordination, fiduciary management and reporting and that Datsun Suriname NV would be responsible for technical implementation and quality assurance of technical training, franchise design, recruitment of participants and implementation of the network of ASWs, with some support from Yamaha. A Donor's Memorandum was approved in December 2012 which set out the detailed project design and a Letter of Agreement (a governing contract for the

provision of MIF resources) was signed by the IADB and the SFOB as Executing Agency in June 2013:

1. **Datsun Suriname:** Technical and logistics coordination. As the private partner it committed to providing 560,000 USD (in financial and in-kind contributions from Datsun and Yamaha) and handling the training of mechanics and coordination of the ASW network. To manage these resources and carry out project activities the company created the Suriname Hinterland Technical Training & Development Foundation (SHTTDF), which will be further discussed on page 9 of this document.
2. **Fonds Ontwikkeling Binnenland (SFOB):** Its role is project planning, coordination of activities with Datsun Suriname, fiduciary management including procurement of goods and services financed from the MIF's project funding, compliance with all IADB/MIF contractual requirements and relevant policies as well as technical and financial. It is a semi-governmental organization under the Ministry of Regional Development, created in 2003 by the Surinamese Government to promote the development of the interior communities. Its board is comprised of Government, NGOs and representatives from maroons and indigenous people's groups.
3. **Inter-American Development Bank (IADB):** Through the Multilateral Investment Fund (MIF), it is the main financier of the project with an 820,000 USD contribution.

Investment:

The total cost of the project was 1,380,000 USD, of which sixty percent (60%) was allocated by the Multilateral Investment Fund (MIF) and forty percent (40%) from the FOB (comprising cash contributions from Datsun Suriname and in-kind contributions from Yamaha Motor Corporation). The resources were distributed over the following main components:

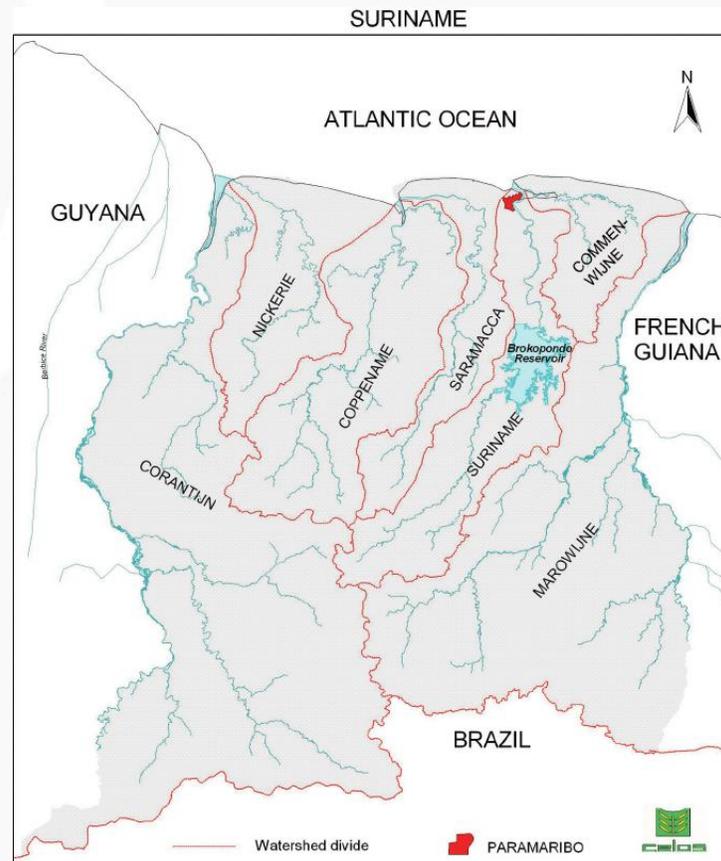
1. Component I: Market analysis and ASW model building
2. Component II: Pilot ASW initiatives and refine the model
3. Component III: Expansion of the refined ASW model
4. Component IV: Creation of knowledge, dissemination and expansion plan to other countries

Inclusive Distribution Model

Recipient population

The ASW model presented an interesting opportunity in the Surinamese context to strengthen the capacity of local workshops to service and repair engines within a short timeframe and with locally-stocked parts, thus improving the livelihood of semi-isolated interior communities. According to the 2012 census, the country's interior villages are populated mostly by Maroon (descendants from African slaves) and indigenous (Amerindians) populations, at a ratio of 5 maroons per 1 Amerindian. This population is distributed in 150 villages, of which 93 have electric generators with no skilled operators and only 89 have a primary school of some sort.

Map of Suriname showing the seven main river basins



Source: Mol *et al.* (2012). *Checklist of freshwater fishes of Suriname*. *Cybiu* 2012, 36(1).

Boat operation is the main activity in most of these villages, although the needs of every community vary depending on its location and demographic profile. Consultant Demis Johnn: “Different communities have different needs: some are fishermen and some are transporters. In the Central and Southern regions they’re more focused on tourism, and on the East they are focused on gold mining”. Whatever the specific occupation, an engine braking down reduces income-generating capacities and generates hazardous wastes (small oil spillages are frequent in rivers) that can affect entire villages. The unemployment rate of fifty percent (50%) compounds on these vulnerabilities, as village mechanics are often transporters themselves.

The ASW Model

The goal of the project is to raise the incomes of rural population in Suriname by building a network of Authorized Service Workshops using a micro franchise model, expanding entrepreneurial capacities and anticipating the nation-wide ban on 2-stroke engines by training mechanics on how to repair the more-complicated 4-stroke engines.

The model is predicated on the existence of workshops in the interior provinces, whether formal (i.e. registered businesses with a fixed address, properly conditioned spaces and

trained staff) or informal (i.e. single-person service providers operating in open spaces such as sidewalks or riversides). It provides training and financial assistance to service providers and workshop operators, to ensure a Quality-of-Service baseline and serve as brand ambassadors and inventory managers to Yamaha engine and parts. Participants need to complete the training and agree to take part in the initiative.

ASWs can be of three distinct levels (3S, 2S and 1S), according to the participant's capacity to reliably provide a certain level of service:

3S - These workshops provide best-in-class service and work as a hub of communications and stock of parts for the rest of the ASWs. They offer repair services, sell spare parts and sell Yamaha engines. 3S ASWs get a twenty five percent (25%) price discount in engines and parts prices. As of October 2017 there were 14 established 3S-level ASWs, employing a total of 36 people.

Requirements to qualify as a 3S ASW:

- Have a workshop of at least 35m².
- Have a Yamaha ASW sign.
- Have a roof, four sidewalls and a concrete floor.
- Wear safety clothing, shoes and eye protectors.
- Have a Test tank, Workbench, General Tools, Special Tools, Impellers, throttle cables, lower unit washers, spark plugs, diaphragm of all engines in his area, bearings, seals, gasket sets.
- Keep an inventory of tools and spare parts.

2S - They provide repair services for Yamaha engines and sell spare parts, but not new engines. 2S ASWs get a 20% price discount in parts prices. As of October 2017 there were 8 established 2S-level ASWs, employing a total 10 people.

Requirements to qualify as a 2S ASW:

- Have a workshop of at least 25m².
- Have a roof, at least one sidewall and a concrete floor.
- Have a Yamaha ASW sign.
- Wear safety clothing, shoes and eye protectors.
- Have a Test tank, Workbench, General Tools, Impellers, throttle cables, lower unit washers, spark plugs, diaphragm of all engines in his area, bearings and seals.
- Keep an inventory of tools and spare parts.

1S - They work as satellite shops for 2S and 3S ASWs, and only offer repair services. 1S ASWs get a fifteen percent (15%) price discount in parts prices. As of November 2017 there were 64 established 1S-level ASWs, employing a similar number of people.

Requirements to qualify as 1S ASW:

- Have all the general tools and testers.
- Wear safety clothing, shoes and eye protectors.
- Have impellers, throttle cables, lower unit washers, spark plugs and diaphragm of all engines in your area.
- Keep an inventory of tools and spare parts.

All ASWs are required to keep a written or digital record of all expenses and incomes, to know and report the value of all the business's assets and to have an invoicing system.

All transactions are conducted in cash and Datsun Suriname has fieldworkers who monitor transactions and allow it to share risks. According to their level (3S, 2S or 1S), ASWs can be stocked with engines and parts on a consignment model, with a 30-day window for the client to deposit and receive the product.

For current or potential workshop owners, the ASW program can be an attractive opportunity to:

1. receive certified training on how to service and replace engines and parts in a safe environment;
2. obtain discounts on engines and parts;
3. gain access to a network of workshops that can provide tools or parts within hours;
4. opt for a microloan to improve or expand the business.

Support activities

a) Recruitment

With support from the IADB and Community Empowerment Solutions (CE Solutions), the recruitment process was modeled after CE Solution's Micro-Consignment Model, which aims to empower community leaders by relying on and strengthening existing networks of trust. The model has been replicated in several countries to distribute reading glasses, solar cells, water filters and cooking stoves. Consultant Madalina Bouros: "The idea is that you identify community leaders, you train them and they go out through their communities and they start distributing (...). I think for the work in Suriname the idea was the same: to identify the people that already have a strong relationship with the community and support them with tools and knowledge so they can grow and succeed."

Datsun Suriname conducts quarterly service campaigns in interior villages in which the company provides free oil, spark plugs and seals for engines but also services generators and water pumps. These service campaigns strengthen the brand's presence and serve as good opportunities to identify potential candidates for recruitment into the ASW network. When people bring their engines, generators or water pumps for repairs, a Datsun representative registers who usually does the repairs - this way they can identify mechanics with pre-established social capital and, if they pass the assessment and agree to participate, are enlisted to receive training.

The process to apply into the ASW Micro Franchise program is as follows:

1. **Selection of candidates.** Potential candidates are asked to fill an application form that gathers information about how they are currently running their business (how many people are employed, how long has it been running, how many engines are served in a certain period, the level of monthly expenses) and about the type of support required (for example Human Resources, Administrative or Financial Management, Customer Service and Marketing or Equipment and Infrastructure). The Technical Consultant then conducts an on-site evaluation in which an eligibility checklist is filled to verify aspects such as the physical characteristics of the workshop, the working conditions of its employees and the type of administrative and financial management systems in place.
2. **Micro Franchisee in Training (MFiT).** If the application is approved, the micro franchisee signs a three-month agreement to receive Micro Franchise Guide, technical catalogs, training manuals and business model tools. The micro franchisee receives an optional preparatory training (tailor-made according to the applicant's needs in the areas of human resources, administrative management, financial management, customer service & marketing and equipment & infrastructure) followed by a mandatory standard training plan covering technical aspects and how to run an ASW Micro Franchise.
3. **Certified Micro Franchisee (CMF).** If training is completed and validated via a hands-on assignment, the Micro-Franchisee earns the Authorized Service Workshop (ASW) classification and becomes eligible for financing. The applicant is welcomed into the ASW network and agrees to submit information on Key Performance Indicators (KPIs) regarding sales, inventory and repairs. The CMF certification must be renewed yearly, in a process monitored by the SHTTDF.

b) Training

Datsun Suriname can provide training for mechanics in their village or in Paramaribo at the Datsun Suriname headquarters. The second option is often preferred as trainees can better focus on their tasks (as they often play several roles in their villages and can be subject to distractions), although costs are understandably higher this way.

Training usually takes 2 weeks. The first week focuses on developing a basic understanding of how the engine and propeller works, how to calculate the propeller pitch and how to read manuals and catalogs, while the second week focuses on how to service and repair the lower and upper units of the engine. Language can be a problem in these sessions since illiteracy is high in the interior communities, some people only speak local dialects and official training materials are in English. To overcome these obstacles instructors use pictures, graphical diagrams and practice engines, which are selected to match the most common models available in each mechanic's community. By the end of the course, trainees are expected to

be able to disassemble and reassemble an engine. Classes are kept small (less than 10 people), to be able to keep everyone's attention engaged.

As an example, a typical four-stroke engine training course will last 4 days and will cover:

1. Day 1: Introduction to four-stroke outboard engines, mechanical engines, lubrication, fuel, fuel injection.
2. Day 2: Carburetor, sparkplugs, electrical systems and propellers.
3. Day 3: Practicing procedures for replacing t-belts, how to use micro-meter & cylinder bore gauge.
4. Day 4: Connecting & main bearing selection, final test.

After a course ends, participants are asked to fill a small survey.

c) Initial funding to set up the workshop

Once participants receive training and have agreed to participate in the ASW network, a small investment is usually required to bring their establishment up to the required quality standard. This might involve reinforcing structures, installing or repairing roofs or walls, stocking up on parts and installing measures to keep engines and parts safe and secure.

Funding for these activities was not accounted for in the original project so different solutions had to be tested. Due to local history, traditional banks and even micro financing institutions didn't have a presence in the interior villages and weren't used to working with maroons and indigenous communities - which meant that many initial candidates dropped out of the program due to their inability to cover these costs up-front.

In 2015 Datsun Suriname set up the Suriname Hinterland Technical Training & Development Foundation (SHTTDF) to manage project activities and to address the problem of initial financing through a Micro-Finance programme. Although it was originally effective in reducing drop-out rates, some ASWs overspent by stocking-up on unneeded parts and the SHTTDF is currently experiencing default rates of around fifty percent (50%). These rates, although entirely too high to make the SHTTDF financially sustainable, seem to be connected to the general economic recession experienced by the country after the 2013 commodity price fall. When interviews for this study were conducted, a consultant had been hired to assess the situation and develop a training program to strengthen participant's business management skills.

The SHTTDF is kept on a separate administration from Datsun Suriname and is chaired by Mr. Michael Jong Tjien Fa, with Mrs. Kelly Jong Tjien Fa as Treasurer and Ms. Erica Jong Tjien Fa as Secretary. It is financed through a loan from one of the country's main banks and it in turn lends money to ASWs at a twenty four percent (24%) interest rate. Field workers and loan officers get paid an average of 10 to 15% out of this 24% rate.

d) Monitoring & control

Every ASW receives a cell phone and SIM card, paid-for from ASW project resources, so they can keep in contact with the Datsun Suriname central office to request services, order parts or ask for technical advice. This allows the central office to track demand for engines and parts in the different regions of the country. Datsun Suriname uses this demand data to develop a stocking plan for each ASW based on local and seasonal demand. Because of the initial funding difficulties indicated in the previous section, the central office estimates that the ASW network currently comprises 72 mechanics despite having trained 162.

Results and achievements

For the community:

1. **Reducing the wait time for servicing/replacing engines.** In communities so dependent on boats for everyday tasks, every minute an engine is out-of-service counts. Certain demographics can be especially affected, as Kelly Jong Tjien Fa explains: “if the engine is down children cannot attend school nor receive urgent medical attention. They should have access to these basic services that we take for granted in the city”. Datsun Suriname monitors regional demand for tools and parts to keep a sufficient amount of stock available in each ASW. When an ASW doesn’t have a tool or part, they are encouraged to contact other nearby ASWs. Usually tools or parts are located and sent within 4 hours - a significant improvement from the previous process that required the customer to travel to Paramaribo for several days. Marlon Cairo, SFOB Managing Director, adds: “coming to Paramaribo from the interior usually takes 2 hours in a small plane or 3 hours by boat. (...) before, people had to come to the city to service their part or bring the whole machine. One guy came to Paramaribo to service his engine and paid 30 USD in service costs, but his transportation costs were 100 USD. Now, parts and service are right there in the village and they have to pay much less to transport themselves”.
2. **Redirecting savings to satisfy other needs.** Besides reducing the wait time for engine service or replacement, the ASW program allows final customers to save money by eliminating the need for them to travel to Paramaribo. Marlon Cairo: “the money that’s saved goes to paying school tuitions, buying supplies or buying water tanks to bring water from the river”. Also, while the standard of living is still relatively low, some improvements have been made. Rene Djasmin, from Datsun Suriname, explains: “Before, people had no electricity and now they can purchase generators to power electric appliances with the money they saved”.
3. **Increasing trust and the social fabric.** The training and support provided by the program allows mechanics to provide quicker and better service. Project stakeholders have noticed positive changes in workshop-customer relations. Datsun Suriname’s Rene Djasmin: “We’re making less repairs here in Paramaribo because people prefer to go to their local ASWs as they have more confidence”. Improving the mechanic’s

abilities contributes to strengthening the community's talent pool and provides a way for youths to receive gainful income as mechanics, discouraging them from engaging in illicit activities. Single women with children can also generate income by establishing or getting involved in ASWs.

For Datsun Suriname:

1. **Increased volumes in higher-markup products.** Although overall engine sales have gone down by about fifty percent (50%), sales of parts have gone up significantly and when markups are taken into account (between 20 and 30% for engines, between 50 and 60% for parts) financial flows have actually improved.
2. **Reduced costs thanks to more efficient inventory management.** Thanks to the communication between ASWs a part can be requested, located and delivered usually in 4 hours, from another partner ASW in nearby regions. In the worst-case scenario that it takes two days for parts to be located and sent from Paramaribo, it is still a quicker turnaround time than before.
3. **Protecting market share.** Since local service and repairs are now more reliable and original parts are now less expensive, the number of grey-market engines and parts in circulation has gone down.

For the FOB:

1. **Strengthening its field presence.** Although more from an administrative role, the FOB has benefited from the initiative by acquiring better data about the skills profiles of communities in the interior and by positioning itself as a partner for empowering workshop owners.

For workshop operators:

1. **Workshop condition improvements.** Just by enrolling in the program and striving to meet the quality requirements, physical conditions are noticeably improved and workshops can operate in a more efficient manner.
2. **Generating jobs.** Although not a massively scalable engine for jobs, a well-run ASW can generate jobs and financial stability for several people. Consultant Demis Johnn explains: "A 1S is usually maintained by one person; a 2S can have two people working and sometimes a third doing administrative work; a 3S is usually a family-owned business so sometimes you'll have two brothers as bosses and 4 or 5 mechanics working for them". Also, skills can be used in repairing power generators and other appliances, generating higher income than other available alternatives such as agriculture or mining.
3. **Improving business management and financial planning skills.** Managing a business usually demands that workshop operators develop different skills such as financial literacy, accounting and budgeting. Some participants still don't see the

usefulness of keeping administrative systems up-to-date (which indicates that some cultural barriers are harder to surmount than others) but organizing groups into communities of learning (lateral dynamics where advice comes from other participants and not from the facilitator) can have a higher rate of success.

Lessons learned

Success factors:

- **Effective community relations.** Given the cultural differences between the people in the cities and those living in the interior villages, it is likely a good asset that the main liaison between the company and ASWs is Mr. Shalmar Prisirie, a man with strong family ties to the interior who learnt about outboard engines growing up and who can build rapport with workshop operators by speaking to them in their own language. He has been handling communications with ASWs since 2014.
- **Ability to adapt methodologies and pedagogic tools to the cultural context.** Using drawings and pictures during training has allowed the company to overcome the language barrier posed by the materials being in English. The learning-by-doing pedagogy, where participants practice disassembling and reassembling engines in small groups, fosters lateral learning and allows them to troubleshoot and find solutions to problems amongst themselves, reinforcing the learning.
- **Agile, results-oriented management.** The leadership at Datsun Suriname has shown a continuous commitment to efficient execution, often pooling from its own resources to execute activities whenever formal procedures for financial approval have threatened to delay certain milestones. Although the original goal of creating 30 ASWs has had to be revised to 25 (of which 14 3S ASWs were active by October 2017), certainly that number would be much harder to achieve if it were not for this drive. However, although positive for the project's results, this drive at times generated conflict and lack of coordination between the parties as will be detailed in the following section.

Obstacles and barriers

- **Public - Private (dis)coordination.** Coordinating actions between Datsun Suriname (private commercial enterprise responsible for technical training, implementation and management of the ASW network) and the SFOB (an NGO responsible for fiduciary management, project oversight and reporting) has proven difficult throughout the project. Differing perspectives, lack of clarity on roles and lack of communication and coordination between Datsun Suriname and SFOB have sometimes resulted in significant delays, which have required the IADB to step in as a mediator of sorts. Impasses of this kind have affected the parties' disposition to share information with each other, which has at times adversely impacted schedules and timing of review procedures for procurement and payment processes. In December 2017 (when

interviews for this study were conducted) the project's Steering Committee hadn't met since early 2016. A number staff and leadership changes at SFOB in 2016 and 2017 compounded these issues.

- **Lack of instruments for financing ASWs.** The time between the training and the establishment of the ASW is crucial for keeping mechanics engaged. At the beginning of the project several potential ASWs were lost due to the inability to secure initial financial support during this timeframe, which is necessary to bring the workshops up-to-par with the minimum standards. These details were ironed out in subsequent attempts and we believe Datsun Suriname can replicate the model in different regions, using its own resources.
- **The human capital factors.** As is usually the case with subsistence markets, managerial knowledge is scarce and engaging all possible partners with a single pedagogic approach has proven difficult. Suriname's multilingual context also added extra complexity. In late 2017 a consultant was hired to develop a strategy to strengthen the entrepreneurial skills of workshop managers - a coaching session was conducted with ASW managers in early 2018 and received very positive feedback, indicating that a coaching component should have been considered in the original design to strengthen the model's sustainability.