# Assessment report for Guyana

Dates of visit; 31 May - 4 June 2015

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# Official agencies

To gather information regarding official control related to SPS measures in Guyana two consultations were arranged with staff from official agencies working in this area.

## Consultation held June 1st 2015 at Fisheries Department in Guyana

In addition to the mission team this consultation was attended by representatives from Fisheries Department (FD) and Veterinary Public Health (VPH) refer to Appendix for the complete list of attendants. The consultation focused on developing an understanding of the roles and responsibilities of the various agencies/departments in the area of health and food safety in the fisheries and aquaculture sectors. It was clarified that while the FD issues licences for fishing, consistent with regulations of the Fisheries Act, these did not cover SPS issues. Veterinary Public Health (VPH) under the Ministry of health, is in charge for official controls of Fishery Products (FP) since 2003 and is the competent authority (CA) for Guyana, their role is to ensure that all food business operators (FBOs) are working according to regulation. According to procedures the CA inspect and licenses all fisheries production establishment i.e. fishing vessels, landing sites, trucks for transport of fisheries products, processing plants. The CA also issues health certificates for export & import of fisheries products.

VPH communicates the result from the inspection of fishing vessels to the FD and the licensing of the vessels is based on VPH recommendation. Nevertheless, there are no written agreements available between these two agencies. The CA is not responsible for issuing and revoking licenses to fishing vessels and that could lead to complications as this is an important tool for the CA to enforce the relevant regulations. The CA has developed certain manuals including an inspection manual and the Team was advised that these were consistent with the existing legislative provisions. This Inspection manual was not provided to the Team. All surveillance and monitoring records were damaged in a recent (2013) fire, and since then the CA has been using traditional paper records.

The Team was informed that the CA conducts inspections of facilities at least annually, but the frequency of inspection of FBOs is based on risk assessment (RA). If corrective actions are required, the FBO is given notice and time for remedial action. Inspections can be conducted with increased frequency depending on the results of the inspection. Inspectors are rotated to avoid creation of close relationships with the FBOs.

The Team was advised that the CA was lacking human resources but the existing staff was well trained and had received training at the Guyana School of Agriculture, and there were also veterinarians who were specialized in food hygiene, fish inspection, quality assurance, sanitation, etc. Most of the staff at VPH have been formally trained with the EU Council for product safety and assurance. The CA furthermore informed that they are lacking financial resources to conduct necessary analysis of official control samples.

## Consultation held June 2nd 2015 at Environmental Protection Agency (EPA)

In addition to the mission team this consultation was attended by representatives from EPA, please refer to Appendix for the complete list of attendance. The main purpose of the consultation was to seek information regarding the role and functions of the EPA in an effort to appreciate the linkages with the SPS measures in Guyana.

The team was informed that in the case of aquaculture operations, new facilities applying for authorization need to produce an environmental management plan, and these are evaluated taking into account the size and location of the proposed operation, as well as how ponds are being built and water quality aspects. In this regard, for new facilities, the process would normally warrant a site visit, completion of an Environmental Impact Assessment (EIA) and a social impact assessment. This process can take 6 months to 1 year. Any permit issued also has associated conditions covering requirements for operation, such as use of well, effluent flow, ground water monitoring.

EPA is furthermore responsible for environmental monitoring and should therefore carry out monitoring programme on contaminants in the marine environment. This program is however not functional at the moment, but EPA is in the process of building up these capacities. Concerning queries about heavy metal and contaminants testing, EPA staff confirmed that there was no capacity to test for mercury, while iron and manganese tests are performed. Currently no analysis are carried out for persistent organic pollutants.

EPA is responsible for testing of water from well to production facilities, however they only test for heavy metals but include other relevant parameters like e.g. persistent organic pollutants and microbial tests.

The Team then asked about the litter observed at the main Georgetown Wharf. EPA admitted that it remained unclear who was responsible for keeping the Wharf tidy. However, there was a new littering law in place, which would need to be enforced. There was also some discussion about the challenge of enforcing the laws in place.

# Sites visited in Guyana

To assess enforcement procedures a number of site visits were carried out according to the table below.

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| **Type** | **Number****of visits** |
| Landing sites | 3 |
| Aquaculture sites | 1 |
| Processing establishment | 4 |
| Ice production plants | 2 |
| Laboratory | 1 |

The Team made direct observations regarding the infrastructure, vessels, equipment, environment, and made further enquiries about harvest and post-harvest procedures, aquaculture feed storage, fish transport, etc.

## Landing sites, vessels and ice production

Please refer to the section *SPS requirements for fish and aquaculture* in the general background report regarding the minimum SPS requirements for landing sites, vessels and ice production.

Main observations noted:

* Artisanal vessels seem to be the main type of fishing vessels used in Guyana
* Fishing vessels were made of material (wood) that is difficult to clean
* Fishing vessels have insulated ice boxes and the fish is iced at sea
* Larger fish was landed gutted, while smaller fish was generally not landed gutted
* In some case the unloading of the fishing vessels was carried out by throwing the fish onto the dock using bare hands
* Ice used on boat, but very limited use of ice after landing
* Fish stored on bare ground and sold on the site
* Some landing site were not fenced off
* Numerous unauthorised persons were observed at the sites
* Fish transported from landing site in nylon bags, plastic buckets, wooden and steel wheel barrels. These containers were all unhygienic and not sanitised
* Some fish was processed (mostly on uncleaned wooden tables) and sold on the site i.e. not a clear separation between processing and landing of fish
* Limited or no running water at landing site
* Waste management not in place, hence plastic and other waste was piling up on all of the landing sites.
* Many different animals (dogs, cows, sheep) were observed at one of the sites visited
* No ice production was available at two of the landing sites. However, there was ice processing facility at one of the sites but was badly maintained and ice stored on floor and there was no separation between storage area and walking area
* No hygienic facilities were observed
* In trucks used to transport fish from landing sites the fish in generally stored on the floor of the truck and only separated using wood boards. Some ice used to cool fish, but also fish without ice because the truck is used to sell fish directly to customers at the site. The Team observed that workers stand on the fish & ice in the storage area of the truck

## Processing establishment

The mission Team visited in total four processing establishments, two of these establishments processed mainly fish, one establishments processed both fish and shrimp, while one establishments processed solely shrimp. The status of the facilities in regards to SPS measures ranged from being very good to poor; please refer to the section *SPS requirements for fish and aquaculture* in the general background report regarding the minimum SPS requirements for processing establishments.

The mission team noted that the processing establishments that were producing fishery products for export were satisfactory in terms of SPS requirements, while the establishment producing fishery products for the local market was not.

Main observation noted by the mission team:

In three out of the four establishments the mission Team was informed that the Veterinary Public Health (VPH) had conducted an inspection within the last 12 months and they left a summary of their findings. The formal inspection report from their last visit had though not be sent. It was stated that often this formal report is not received until some months after an inspection had been conducted. In the fourth establishment the responsible person was not sure whether the VPH had conducted an inspection but the owner of the facility was not available to confirm this.

In three out of the four establishment visited the structure, layout, maintenance and hygiene conditions for the processing and handling of raw material was satisfactory. In one of the establishments many problems were observed related to structure, layout, maintenance and the processing environment of the facility e.g. inadequate lay-out, with insufficient separation between clean and unclean areas which could lead to cross-contamination; very poor floors with cracks and pooling of water, not maintained in a sound condition and not easy to clean and to disinfect; unsuitable walls, which were rough, not easy to clean and not of a non-absorbent, washable material; unsuitable ceilings not constructed and finished so as to prevent the accumulation of dirt and to reduce condensations; very poor maintenance of equipment; very poor state of maintenance and cleanliness of changing rooms; very poor cleanliness and state of maintenance of cold stores with exposed and packaged fishery products. This processing establishment was producing fishery products for the local market.

In all facilities ice was used to keep the product cool during processing.

A HACCP system was in place in three out of the four establishments visited, while in one no food safety system was available.

The mission Team was informed that workers receive some basic training. However in facilities were supply of raw material is unstable the workers are not full time employees and such cases it is difficult organise training.

At least two of the processing facilities visited are using their own water supply for processing and ice production. Their quality personnel carries out own checks of the water used in their facilities and these include analysis of microbes and heavy metals.

## Laboratories

The mission Team visited the laboratory in the Institute of Applied Science and Technology at the University of Guyana, as this is one of the laboratories that has been designated by the CA in Guyana to carry out analyses on fishery products as well as water and ice in the context of official controls. The team was informed that this laboratory is not accredited to ISO standard 17025. The Team was also informed that the laboratory had not received any official control samples for microbiological and chemical analysis for two years.

In addition, Food and Drug Department has been designated by the CA in Guyana to carry out some analysis on official control samples but the mission Team did not have the opportunity to visit this laboratory, but was informed that this laboratory is also not accredited to ISO standard 17025.

# Consultation with stakeholders

National Consultation with stakeholders in Guyana took place on June 3rd 2015.

The key challenges highlighted were the following:

* Insufficient enforcement of regulation by the CA at the source of the deficiencies
* Attitude and mind set of fishermen and workers in primary production. Generally fishermen have very limited education and therefore very difficult to transfer knowledge to them e.g. regarding maintenance of facilities, personal hygiene, hygienic handling of fish, importance of ice for cooling of fish.
* Management environment for owners of fisheries products establishments & fishing vessels is very instable, which in turn reduces the willingness to invest in the maintenance of boats landing sites etc.
* Several factors were identified which were linked to planning and management, and which were likely also contributing to the current attitude of fisherfolk in primary production. These were: poor infrastructure; weak enforcement; inadequate policies and support for their implementation; the absence of a National Fisherfolk Organization, and; apparent lack of planning for anticipated future developments of the fisheries and aquaculture sectors e.g. predicting and planning for likely future demands to be able to export fishery products and developing of new fishery and aquaculture products
* Attitude and mind set of local consumers. Some consumers actually prefer that fish is not placed on ice, as ice usage meant the fish was no longer fresh and that flies on the fish are an indicator of freshness.

# Conclusion

The Veterinary Public Health within the Ministry of Health is clearly defined in the national regulatory framework regulation as the competent authority (CA) of Guyana. They are responsible for official control of all food business operators and to issue certificates and licenses. The Fisheries Department of the Ministry of Agriculture is issuing licences to vessels/boats based on outcome of inspection by the VPH. There are, however, no written Memoranda of Understanding (MoU’s) between the two agencies in this regards. The CA can delegate certain activities to different agencies. However, they can only delegate the responsibility for these activities if there are written agreements and documented procedures regarding these activities.

The key to harmonization of regulatory enforcement is to have documented work procedures in place that explain in details how inspection should be conducted according to the regulatory requirements. Linked to such work procedures (usually called Inspection Manual) is a check list that can be used by the official inspectors during the inspection. Although the mission Team was unable to receive a copy the manual used by the CA it was informed that such document existed, but this could not be verified. An annual inspection plan is prepared by the CA and this plan is necessary to organize and have an overview of the implementation of inspection.

According to EU and national regulations the CA is required to carry out various official monitoring and surveillance of fishery products and to fulfil these requirements the CA should take official control samples for analyses to verify compliance with the legislation and to assess consumer exposure in terms of food safety. However, due to lack of financial resources, the CA in Guyana has no not been able carry out analysis of official control samples for 2 years. Sometimes, these official analysis may be a prerequisite for issuing export licences. Furthermore, neither a National Program for monitoring of environmental contaminants in products from wild fisheries nor a National Residue Control Plan for monitoring of residues of veterinary medicines and environmental contaminants in products from aquaculture are in place.

Accredited laboratories capacities are not available in the country, although this is a requirement for official analyses according to EU and national regulations.

Site visits indicated that the regulatory requirements related to health and food safety issues in the fisheries and aquaculture sectors of Guyana are not always enforced. Considerable deviations were observed at some sites, while at other sites requirements seem to be fulfilled. Although the same SPS regulatory requirements apply for all fish and fisheries production, the enforcement is different between production for export and production for the local market.

The roles and responsibilities of the different agencies are not completely clear regarding SPS-related monitoringwhich results in confusion regarding the tasks of the different agencies e.g. responsibility for control of environmental issues at the landing sites (wharf) was not clear between the EPA and VPH. This is not unusual when a written documented procedures and agreements are not in place between different agencies.

Animals should be kept away from aquaculture farm ponds, fish feed and landing sites. Several known parasites can be transported with animal faeces into the aquaculture pond and/or feed and to the fish, hence this could lead to contamination that could be carried on to the consumer with serious health effects.

Processing and handling of fishery products for the domestic market is neither according to SPS requirements nor according to national regulations for these products. Considerable effort is needed to change the mind-set of the fishermen, fish vendors, processors and consumers e.g. regarding personal hygiene, hygienic handling of fish and the importance of ice for cooling of fishery products.

# Recommendations

The CA is delegating the licensing of vessels to the Department of Fisheries to utilise the human resources at place. This is common practise but written documented procedures are required that clarify the responsibilities and tasks performed by both parties. These written procedures should also include arrangements regarding sharing of information and data so that the CA is able to react without delay if something goes wrong. Verbal agreements and information sharing is not sufficient and written documented procedures should be implemented.

Inspection manuals are important to enforce regulations and to harmonize the inspection system. It is also important that the Food Business Operators are well informed regarding which requirements they must fulfil and how their operation are evaluated as that will assist them in fulfilling their obligation. Therefore it is recommended that the inspection manual is accessible to all stakeholders, for example on the Internet, free of charge.

As the food processors are responsible for ensuring the safety of their production they are expected to exercise due diligence and self-controls (own checks), hence the testing for the microbiological status of food should be carried out by them. The CA should also take official control samples for microbiological analyses to verify that the food processors quality system is working. As this is an essential part of having a license to operate, it is not unfair that the industry covers the cost related to the analysis of these official control samples. This could, for example, be part of their annual license fee and if the results obtained are unsatisfactory extra payment from the FBOs in question should be required by the CA. This type of user fee would enable the CA to guarantee financial independence and sustainability of the official laboratories and that official control samples are tested on regular bases to verify the safety of water, ice and fisheries products.

The CA should ensure that official control samples for fishery products intended for export to the EU include official controls on the products, water and ice in line with the relevant Community requirements i.e. Regulation (EC) No 852/2004 and Directive 98/83/EC. The CA should also ensure that laboratories performing official analyses are assessed and accredited in accordance with standards providing guarantees at least equivalent to the requirements Regulation (EC) No 882/2004. The CA should also ensure that these laboratories take into account criteria for the different testing methods laid down in EC legislation. It is recommended that an assessment (including a cost-benefit analysis) is carried out to evaluate which laboratory analyses is feasible to accredit and conduct nationally and which would be more beneficial to outsource.

Testing for contaminants/undesirable substances that unintentionally come in contact with food/feed and primary products e.g. PCB's and dioxins are also the responsibility of the producer as he must secure the safety of his product. However, testing for these undesirable substances in each assignment sold is far too expensive. Therefore it is better to establish a nationwide/regional wide monitoring plan that is carried out on regular basis to be able to assess consumer exposure to these undesirable substances. This type of monitoring plan for contaminants/undesirable substances in fishery products and water is currently not in place in Guyana. Similarly, a National Residue Control Plan for monitoring of residues of veterinary medicines and environmental contaminants in products from aquaculture has not been implemented. As neither of these plans are currently in place in Guyana, a suitable solution needs to be initiated and implemented.

Improve the coordination of the different agencies e.g. different organizations are collecting various types of data and should cooperate in the development of a comprehensive data and information exchange system that could be used to monitor, share information and knowledge and report on SPS practices.

It is important to place in motion a plan to improve maintenance and hygiene on board fishing vessels as well as improve SPS measures at landing sites, during transport, fisheries processing plants and in aquaculture in Guyana. This could, for example, be done through wide ranged training of persons working in the primary processing and local fishery products processing facilities e.g. regarding general SPS requirements in fisheries and aquaculture sectors as well as the specific requirements of the EC and USA markets. Training and education of local consumers is also required to improve their understanding and perception regarding food safety of fisheries products. Sharing of experience and best practise as well as success stories from other countries in the Caribbean region could also be a suitable way to create an incentive for persons working in primary processing.

In order to be able to plan for anticipated future developments of the fish industry it is necessary to start to predict and plan for likely future demands of current export markets as well as look out for additional export markets and identify new fishery and aquaculture products for these markets. This requires increased research & development related to the fisheries sector, e.g. regarding development of new products, as this will assist the fisheries sector to move further up the value chain and create a business environment for entrepreneurs in the fisheries industry. This could be achieved through long term (5-10 years) strategic planning with the participation of key stakeholders in the fishery and aquaculture sectors as well as academia.

# Appendix

Consultations held in conjunction with National Consultation regarding; National programmes related to health and food safety in the fisheries and aquaculture sectors

Attendants at SPS consultation held June 1st 2015 at Fisheries Department in Guyana

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