

## Analysis Exercise: Dried shrimp from Utolandia

### Instructions

Read the below short case study, answer the questions filling in the provided template and prepare a short presentation to report your results.

### Case Study

Utolandia is a country which is the lead world exporter of dried shrimps. The country enjoys large coastlines where shrimp is available in relative abundance.

#### ***The dried shrimp value chain***

##### *Fishing*

Small and medium-sized fishing boats depart for night shifts and stay at sea until enough shrimp has been collected for the crew to make a living. Boats are old and equipment expensive, access to finance is uneasy and consequently investments in equipment are limited to a minimum. Most fishermen do not own the boat they work on. Small boats are usually owned by one fisherman who runs a family business, usually fishing himself along with one or two young household members aged 16 to 20. Small boats represent about 40% of the boats but only 15% of the catch. Medium boats are owned by businessmen who rent them to captains and their crew. All crew members are remunerated through a share of the catch, they do not have an employment contract. Facilities on board are very limited and crew members as well as autonomous fishermen enjoy a low level of education (equal or lower than primary-level) and received little formal training. Most of them learn on the job when they are very young, as formal training is not available. Most of the people working in fishing are male, female are usually fishermen's wives who come to help clean the catch when the boat reaches shore. Fishermen and boat owners are organized in the *Association of Fishermen of Utolandia*. The association is active and has members, its primary focus is on advocacy as regards fishing quotas and licence provision. The association is composed only of voluntary members who give their time to the secretariat, there is no full time staff to undertake other activities. Boat owners are provided a licence by the Ministry of Fisheries which is renewed every 5 years. Obtaining this licence is purely administrative and does not involve an inspection of the boat. Officially, the licence supposes compliance with labour legislation, but no formal collaboration exists with the Labour Inspectorate and the few staff members that the Ministry of Fisheries has on the ground are not trained, nor have time, to include this dimension in their daily work.

Upon the boats' return, usually early in the morning, the biggest shrimps are sold on an auction to businessmen from neighbouring Lulaland where they are packed and sent to Japan and the European Union. Since Utolandia does not have access to the necessary infrastructure to make this type of transformation, the biggest shrimps leave directly to Lulaland which captures most of the added-value of exporting fresh shrimp. The lower-quality shrimp stay in Utolandia and are sold to local small and medium companies that dry and pack them for export.

##### *Drying*

Dried shrimp exporters are grouped in the *Utolandia Association of Shrimp exporters* which provides a range of services to its members through its permanent secretariat based at the capital city. Small

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and medium shrimp drying companies in Utolandia have between 10 and 50 workers, usually half of them are permanent and the others are temporary workers paid on a daily basis upon completion of a given volume of packaged dried shrimp during peak seasons. Workers are not organized, there is no trade union present in the sector. Permanent workers are formalized, they have a contract which grants them a salary corresponding to the minimum wage. Additional premiums are awarded upon completion of a given volume of packaged dried shrimp. In practice, the influx of shrimp depends a lot of the volume fishermen manage to sell to businessmen from Lulaland, making work planning difficult for dried shrimp companies in Utolandia. It is difficult to anticipate volumes also on the buyers' side, since Utolandia is in competition with several countries of its region on the global market and there is little stability of orders from international food companies that buy the dried shrimp. Consequently, permanent workers often work long hours to reach their targets of volume of packed dried shrimp and temporary workers are never certain of when they will work. Over 90% of workers in those companies are female. Workers are not provided with work close or personal protective equipment of any kind, which was underlined several times when a few companies were inspected by the Labour Inspectorate, those companies paid a fine but controls never happened twice so practices did not change. Additionally, dried shrimp companies have a hard time retaining workers and there is high turnover. Indeed, many workers are attracted by better working conditions and remuneration in the fresh shrimp packing plants of Lulaland and often times try their luck to cross the border and get a job there. The ones who stay are women in reproductive age who have a family in Utolandia, have less qualifications and cannot afford to leave.

Since dried shrimp companies have difficulties managing the influx of shrimp and struggle to stabilize their work force, they tend to outsource the drying process to women working from home. Those women often get orders from one or two dried shrimp companies with which they have a personal connection. The drying is done in an artisanal manner at their home, alongside with a couple of other activities those women have to ensure their livelihood. Dried shrimp companies buy the shrimp, allocate a given quantity to outsource and then pay the women working from home a price per kilo. Among the other activities performed, most of those women cultivate green beans that they are able to sell to a local cooperative of green beans producers. The cooperative provide the women with various agro-chemical products to facilitate the growth of the green beans. Though this has improved their yield, the women have a hard time handling pesticides and herbicides properly and various accidents have happened at their home. In addition, though no test has been done for lack of available laboratory in Utolandia, it seems the women tend to have little access to water on the farm and do not wash their hands after handling chemicals and before handling shrimps.

Since the drying phase is outsourced to home workers, workers of dried shrimp companies mostly perform the following operations: fresh shrimp sorting, transport to the home of women who dry shrimps and back, sorting of dried shrimp, packing and loading of trucks going to the deep sea port in Utolandia's capital city to be exported. Sorting and packing is semi-mechanized with sorting lines. Sorting and packing positions are standing positions and shifts are 10 hours long. The smell inside the small plants is very strong. There is no rotation of posts and women report suffering from pain in their arms and backs. Pregnant and lactating women usually quit their job as they are not able to work under the conditions of the dried shrimp plants (bathroom reported to be small, not separated from men's, shame of breastfeeding in public) during those periods, this further increase the staff turnover. They seem unaware of the existence of a maternity social security scheme.

#### *Exporting*

Dried shrimps are sold to multinational food companies that mostly use them in processed food products. Dried shrimps are exported to high-end markets, especially the United States, Canada and

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Japan. Though those are sold to high-end markets, the requirements and subsequent price those markets place on dried shrimp is very different from the ones they place on fresh shrimp. The latter needs to respond to strict food safety regulations to enter consuming countries' markets, which require that workers in the processing / packing plants be trained on food handling and that a number of occupational hazards be controlled at plant level. The price paid for fresh shrimp is much higher. Still, in Utolandia the necessary level of skills and financial investment is not enough to enter this market so far. The dried shrimp market is more competitive as there is less differentiation of the product. Dried shrimp from Utolandia is of reasonably good quality, though quality tends to be uneven because of the traditional processes used to dry them. This affects the price that international buyers are ready to pay for the dried shrimp and tends to discourage the ones seeking quality and ready to put the price for it. Additionally, buyers from the United States are getting worried about a bill which is currently in discussion with Congress on establishing minimum levels of chemical residues in dried shrimp, whereas before this requirement only applied to fresh shrimp. International buyers from the US are worried about this perspective and reached out to both the *Association of Shrimp Exporters of Utolandia* and the Ministry of Trade of Utolandia. To this date, they have not responded.

#### ***The institutional framework in which the value chain operates in Utolandia***

The Labour Code of Utolandia provides an overall framework for occupational safety and health, which places the responsibility for the health and safety of workers on the employer. Still, the Labour Code fails to address the situation of unpaid family workers and independent workers. Additionally, there is no specific legislation on occupational safety and health services, which means that in practice there is no occupational health services at workplace level. It seems there is no specific training for the medical specialty in the country. Utolandia has a Social Security System which operates under the Ministry of Health and provides three main guarantees:

- Covers the cost of general health care services (preventive and curative care, medicine).
- Provides income replacement in case of maternity during 12 weeks.
- Provides income replacement in case of temporary or permanent incapacity to work due to a work injury or diseases.

Affiliation to the social security system is mandatory for all formal salaried workers, and it can be accessed on a voluntary basis for the other categories of workers, though in this case they have to pay both worker and employer's contributions (twice what formal salaried workers pay).

For the population unaffiliated to the Social Security System which operates under the Ministry of Health, the cost of accessing medical care is financed out of the household's pocket. In practice, available surveys indicate that those populations delay to a maximum seeking medical care for fear of the cost. Consequently, health services are almost exclusively focussed on curative care in geographical areas where there are very few formal salaried workers affiliated to social security. As a result, the medical personnel in those areas are not used to doing prevention and supporting the identification of preventable work-related diseases and accidents.

The Labour inspectorate of Utolandia is composed of a little over 100 inspectors for a population of 50 million people. 80 of those inspectors are located in Utolandia's capital city, the rest is dispatched within the 30 local labour offices of the Ministry of labour on the ground. On average, the qualifications of labour inspectors are quite low, as the job is not truly attractive to young graduates who enjoy opportunities for better remuneration in the private sector. The labour inspectorate trains

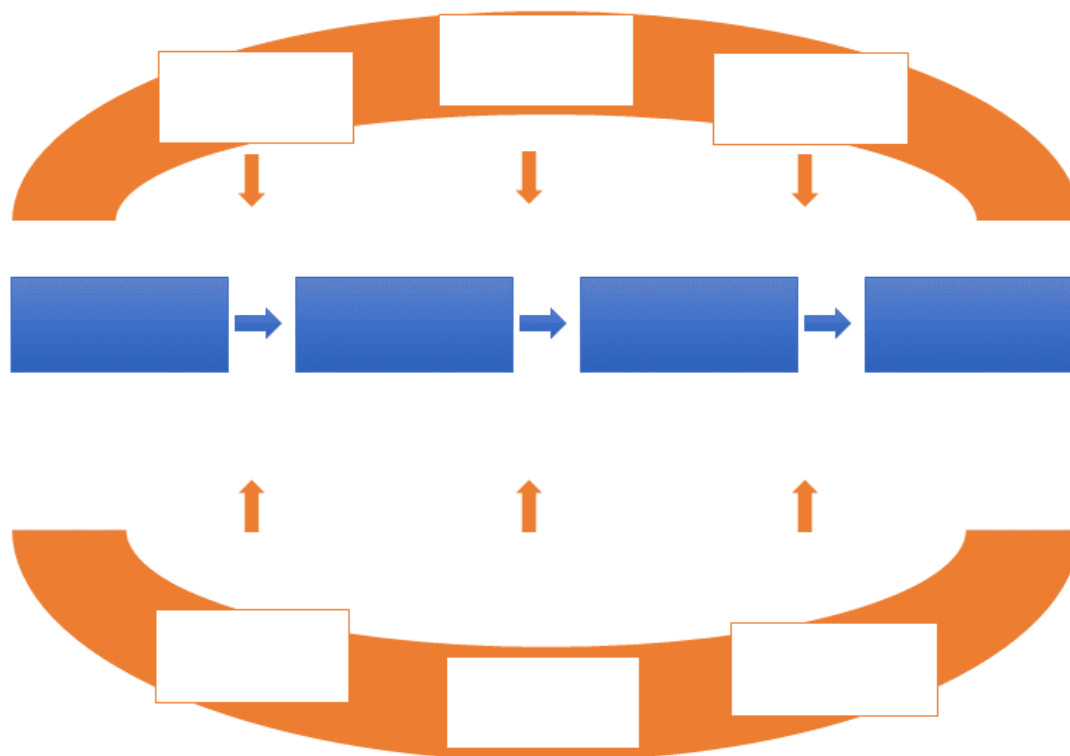
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its inspectors on the job upon appointment, though training techniques have not been updated over the past 20 years and focus mostly on the respect of fundamental rights at work.

#### Questions

Fill in the templates and prepare a 5 minutes presentation on your results.

1. Map the supply chain of dried shrimp from Utolandia and its institutional environment



2. Identify risks, hazards, vulnerabilities and their root causes at each stage of production in Utolandia



| Production stage / supply chain level | Risk<br><i>Nature and importance<br/>(Severity/ probability = risk rating)</i> | Workers concerned | Factors that increase vulnerability<br><i>(factors that increase exposure, existing prevention, protection, coping mechanisms)</i> | Root causes<br><i>(commercial practices, policy and institutional gaps)</i> |
|---------------------------------------|--------------------------------------------------------------------------------|-------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
|                                       |                                                                                |                   |                                                                                                                                    |                                                                             |
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3. Think about the drivers and constraints for improvement and propose at least three interventions that will foster systemic change

| Why?<br>(expected impact) | What?<br>(description of the intervention) | Who?<br>(stakeholders involved and their role) | When?<br>(level of priority) |
|---------------------------|--------------------------------------------|------------------------------------------------|------------------------------|
|                           |                                            |                                                |                              |
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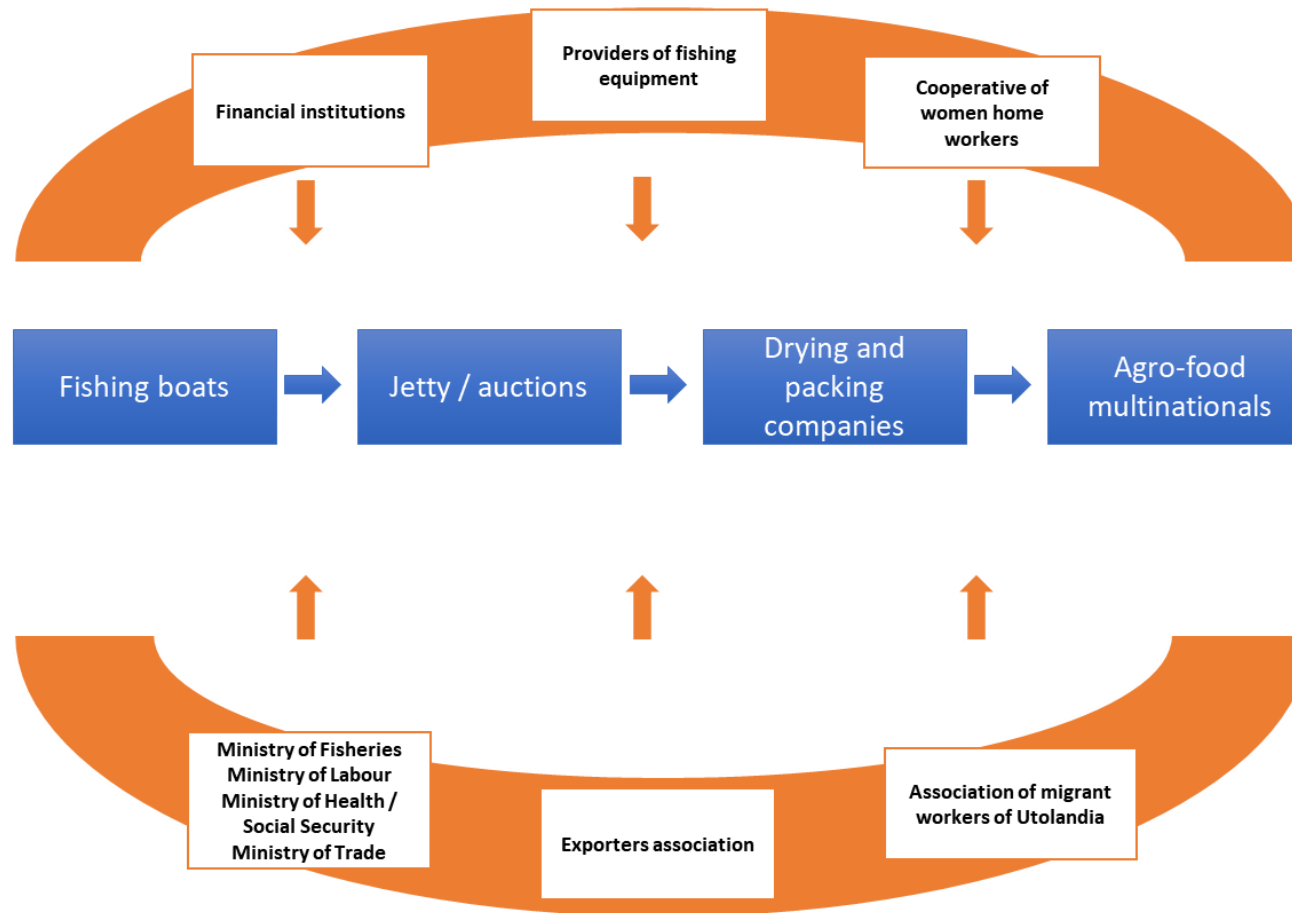
Time to prepare your presentation: 50 minutes.

Presentation: 5 minutes per group.

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Correction

## Mapping



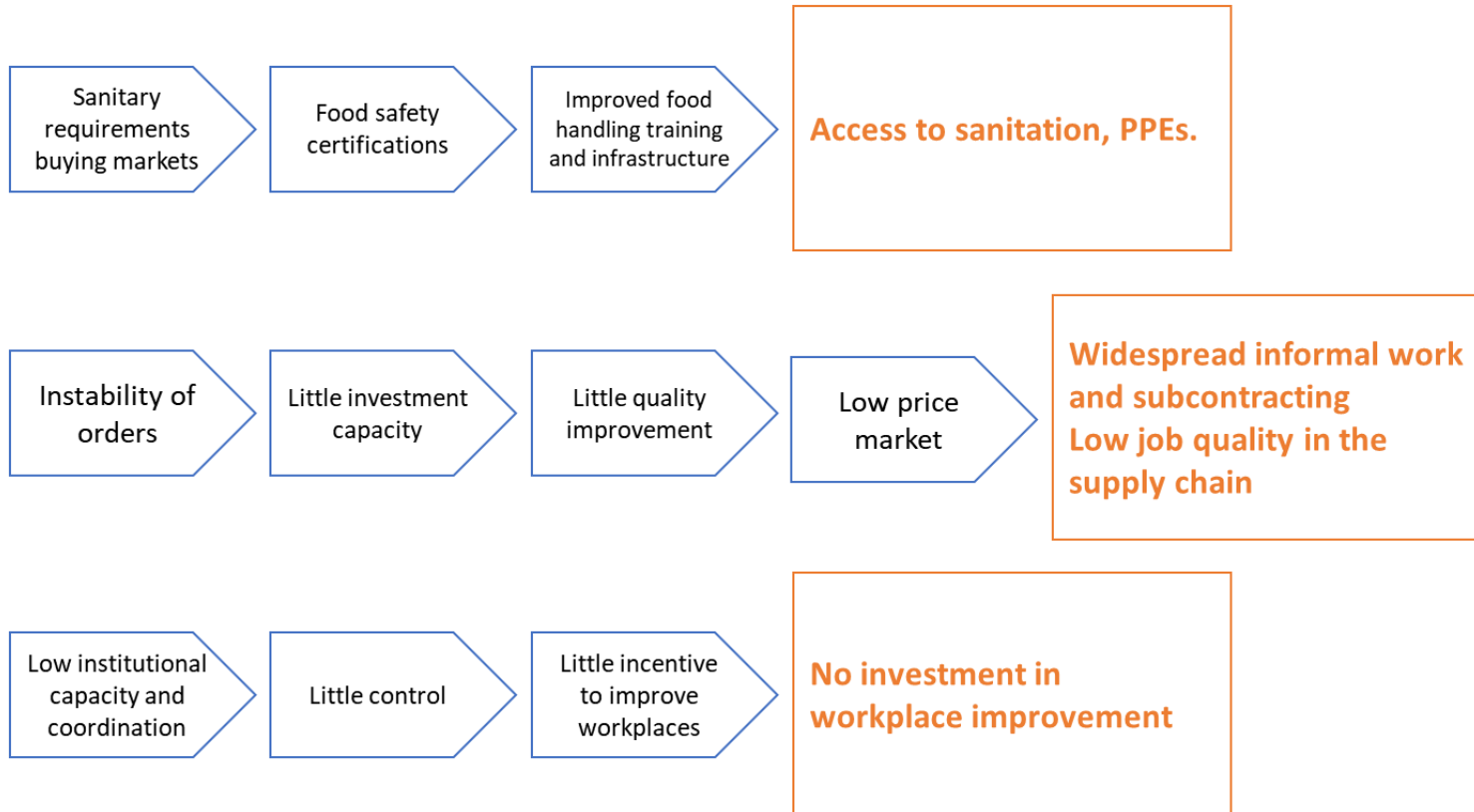
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## Identify risks, vulnerabilities and their root causes at each stage of production



| Production stage / supply chain level              | Risk<br><i>Nature and importance<br/>(Severity/ probability = risk rating)</i>                                                              | Workers concerned                                                                                                  | Factors that increase vulnerability<br><i>(factors that increase exposure, existing prevention, protection, coping mechanisms)</i>                                                                                                                                                                       | Root causes<br><i>(commercial practices, policy and institutional gaps)</i>                                                                                                                                                                                                                        |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fishing boats                                      | Falling and drawing<br>Tool handling (harpoon, nets)<br>Heavy loads<br>Biological risk (fish handling)<br>Unsanitary water / sanitation     | All workers present on board<br>(including family workers, owners and non-owners).<br>Male<br>Age 16 until old age | Young age and absence of training<br>Night work<br>Bad weather<br>Payment on volume<br>Overall poor health status<br>Absence of compensation mechanism                                                                                                                                                   | Low productivity / little access to finance = low resources to invest<br>No control of boats<br>Informal work / No health surveillance                                                                                                                                                             |
| Jetty                                              | Biological risk (fish handling)<br>Unsanitary water / sanitation<br>Heavy loads<br>Slip and fall                                            | Women for the two first<br>All workers for other risks                                                             | Casual / unpaid work (no training)<br>Night work<br>Overall poor health status<br>Absence of compensation mechanism                                                                                                                                                                                      | Low productivity / little access to finance = low resources to invest<br>Informal work/ No health surveillance<br>Weak organisations                                                                                                                                                               |
| Dried shrimp company                               | Biological risk (fish handling)<br>Unsanitary water / sanitation<br>Heavy loads<br>Exposure to chemical residues<br>Exposure to heavy smell | Women workers in reproductive age                                                                                  | Lack of awareness and infrastructure for pregnant and lactating women.<br>Temporary workers most vulnerable: paid on volume, little trained, uncertainty of contract, little access to health, no access to occupational medicine or compensation.<br>Long working hours and production targets for all. | Informal work / high turnover linked to lack of attractivity / poor working conditions<br>Little control<br>Little resources (financial, knowledge, access to supporting functions on OSH)<br>Lack of laboratory to check chemical residues<br>Little health surveillance (permanent workers only) |
| Dried shrimp company subcontractors (home workers) | Biological risk (fish handling)<br>Unsanitary water / sanitation<br>Heavy loads<br>Exposure to agro-chemicals<br>Sun exposure               | Women workers in reproductive age                                                                                  | Pay on volume<br>No training<br>Little information on agro-chemical handling and no PPE<br>Overall poor health status<br>Absence of compensation mechanism                                                                                                                                               | Lack of laboratory to check chemical residues<br>Informal work / No health surveillance<br>Lack of extension services<br>Weak capacities of the cooperative                                                                                                                                        |

## Identify drivers and constraints





## Build intervention models

### Examples

| Level of intervention | Intended OSH impact                                 | Description of intervention model                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Stakeholders involved                                                                                                                                                                                             |
|-----------------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Drying process        | Eliminate chemical risk                             | Engage international buyers as well as Ministry of Trade and Agriculture to promote organic green beans (with price premium)<br>Train the cooperative in organic farming and elimination of agro-chemicals<br>Support the creation of a laboratory for food safety (capable of tracing residues in vegetable and animal products) and get that it becomes an export requirement<br>Raise awareness among women home workers on the effects of agro-chemicals and their organic alternative (training, link to price premium) | Women home workers<br>Cooperative<br>Supermarkets buyer of green beans in destination markets<br>Global buyers of dried and fresh shrimp<br>Ministry of Trade<br>Ministry of Agriculture<br>Ministry of Fisheries |
| Fishing stage         | Unsanitary water and sanitation facilities on board | Foster coordination and joint control between Ministry of Fisheries and Ministry of Labour<br>Promote low-cost improvements on board in collaboration with boat maintenance providers (in priority access to water filters, basic appliances)<br>Support information campaign on basic hygiene on board                                                                                                                                                                                                                      | Ministry of Fisheries<br>Ministry of Labour<br>Ministry of Health<br>Providers of boat maintenance<br>Fishermen / boat owners and their workers<br>Association of Fishermen of Utolandia                          |