



**UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION**  
**ORGANISATION DES NATIONS UNIES POUR LE DEVELOPPEMENT INDUSTRIEL**

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**TERMS OF REFERENCE**

**UPGRADING THE FISHERY SECTOR IN SOUTH SUDAN**

**ESTABLISHING MANAGEMENT AND OPERATIONS OF THE  
KONYOKONYO FISH MARKET, JUBA, SOUTH SUDAN**

## **1. Background**

The vast and highly productive Nile River ecosystem in the Republic of South Sudan (RSS) harbours a significant, but unknown, amount of fish and supports a simple fisheries value chain that has the potential to create employment and positively impact food security in South Sudan.

An inland artisanal fishery exists around lakes, rivers and floodplains with fisher folk mainly using traditional fishing methods that limit their ecological impact. Much of these fisheries are seasonal with fisher folk dividing their time and labour between fishing, crop farming and livestock. These fisher folk and their fishing communities are amongst the most poor and least resilient social group to livelihood shocks and make up a significant part of the severely food insecure households in the country.

This project addresses fishing communities and actors along the entire fisheries value chain, improving food security (in rural households, in particular), creating jobs and setting South Sudan's fishery sector on a path of sustainable growth.

The establishment of fishery sector infrastructure at KonyoKonyo market in Juba, South Sudan, supports the Government in its development plans. The fish market will help reduce post-harvest losses and help ensure that fishery sector workers can sell an improved product and that consumers have access to safe food. The recently constructed market will provide a proper facility to expand the fish trade and cater to the needs of the market workers and the consumers. The market provides more space for each market stall, a location to store fish overnight (fresh and processed), administrative rooms and toilet facilities, as well as a borehole and generator for operations.

It is expected that the operation of the fish market will change how fish is sold and bought in South Sudan, introducing more nutritious food sources to consumers and increasing revenues for people in the fishery sector. In order to introduce and instill best practices at the fish market, a pilot period will be implemented wherein the market will be operated on a training basis, allowing the project and counterparts to ensure the correct execution of technical training courses, execution of new operational and hygienic practices, management practices and other related practices, such as local procurement of goods and services in a real-time environment. At the conclusion of the pilot period, the Kator Block will enter into a contract with a service provider – based on lessons learned during the pilot period – for long-term service provision at the KonyoKonyo Fish Market.

## **2. OBJECTIVE OF THE CONTRACT**

The objective of the contract is to provide services to support the management and operations of the KonyoKonyo Fish Market. The management services contract will include developing the fish market's technical and management plans; running the day-to-day operations for the initial three months to develop and refine operational and technical capacity; and submitting a detailed Market Management Plan, Market Operational Manual, and Business Plan at the end of the contract period.

## **3. SCOPE OF SERVICES TO BE PROVIDED**

Services required for this contract are three-fold and these are:

1. Prior to the commencement of the contract, formulate a management plan which should include details on the operational, technical and administrative directives of fish market (refer to Annex I on suggested contents of the management plan). The management plan may be updated at the conclusion of the contract based on management and operational experience and re-submitted in the form of an updated Market Management Plan and a Market Operational Manual.
2. Operate the fish market according to the management plan. At the minimum, the following requirements shall be an integral part of the operations:
  - Operate the facility and all equipment included in accordance with the hygiene and sanitary schedule found in Annex II.
  - Adhere to technical market regulations as set forth by the Government of South Sudan, in terms of food safety, labour, environment and any other Government decrees or legislation relating to the operations of the fish market.
  - Access to all operational equipment in the fish market, including water and electricity. Keep operational equipment in good working order with regular maintenance checks, repairs and spare parts procured when required. Operational equipment is:
    - borehole and borehole pump and its related systems (water, piping) needed to ensure uninterrupted supply of water; and a
    - 15 KVa Generator and its related systems (electrical cables) needed to ensure an uninterrupted supply of electricity.
  - Monitor compliance of stallholders with GHP and established SSOPs. Alert the project, Kator Block representative and Market Users' Association representative in writing to any individual stallholder that does not abide by the regulations stipulated in the SSOPs for stallholders. Record all infractions, warning and any rectifying actions (if any) taken by the stallholder.
  - Provide the following services to the stallholders (as set forth in the SSOPs for KonyoKonyo Fish Market):

- General cleaning services in accordance to the SSOPs for KonyoKonyo Market, utilizing only environmentally friendly cleaning detergents;
  - Clean access to toilets;
  - Operate the generator to provide 3 hours of electricity each day – early morning and early evening – if required;
  - Provide 20 litres of water to each fresh fish stallholder each day; provide 7 litres of water to each processed fish stallholder each day;
  - Disposal of all wet and solid waste in accordance with provide environmental impact assessment guidelines (and in accordance with SSOPs).
- Develop templates for all market operations, including but not limited to staff recruitment and hours worked; water consumption (at the market and individual stall holder levels); electricity utilization (at the market level); waste management; ice utilization and any other procedure of note to be included in an updated Operational Manual.
  - Keep all costs of the market operations clearly written using a computer programme such as Microsoft Excel or similar, for review and training purposes. Make available all data upon request throughout contract.
  - Record all procurement of goods and services, including cost, provider, terms of contract or terms of sale in a ledger book and make available upon request.
  - Make note of and describe any recycling or utilization of waste opportunities identified.
  - Log all challenges faced and solutions implemented for operational procedures at the market.
  - Make note and describe any additional services relating to the fish market, its operations and the fishery value chain that may affect fish sales at the fish market.

3. At the conclusion of the contract, the following shall be required:

- A report comprising experiences with all above listed activities, as well as subsequent technical and management recommendations;
- Market Operational Manual, including, but not limited to:
  - All technical and administrative procedures associated with the full operations of the fish market
  - Procurement practices
  - Costs
- Market Management Plan, revised if needed
  - Staff structure
  - Finances
- Describe a 3-year business plan for the fish market (see Annex IV for suggested format of the Business Plan.)

#### **4. DURATION OF THE CONTRACT**

The contract will take place over 3 months which may be renewed at the sole discretion of the contractor, UNIDO for an additional three months. Contract commences after signing of the contract.

#### **5. PROPOSAL FORMULATION AND COST BREAKDOWN**

##### **5.1 Language of the proposal**

The proposal shall be written in English and should include a detailed work plan and time schedule.

Find link to the procurement notices: <http://ss.one.un.org/procurement-notice>

##### **5.2. Currency of the proposal and cost breakdown**

The proposal must be quoted in United States of America Dollars and the contract will be awarded in this currency.

##### **5.3 Submission Date**

No proposals will be accepted after 17:00 Juba local time on Friday, 11 August 2017.

#### **6. PLACE OF DELIVERY AND VISIT OF THE PROJECT SITE**

The project site is located as follows:

KonyoKonyo market, Juba, South Sudan

The invitees are recommended to visit the site at their own expense to assess the site in its original state or to see the larger size detailed drawings. For in-country contact details, please contact:

**Mr Victor Cobby Baah**  
**Technical Advisor**  
**UNIDO Office**  
**UNDP Compound**  
**Ministries Rd**  
**Juba, South Sudan**  
**Email: V.Baah@unido.org**

#### **7. TECHNICAL EVALUATION CRITERIA**

The following criteria will be applied for evaluating the proposals:

- Legally authorised to undertake such work in South Sudan. Provision of valid construction licence.

- Understanding of context of the project aims and objects as well as emphasis placed on sustainability of the site and its operations and adherence to the scope of services to be provided, based on technical drawings and bill of quantities submitted.
- Market experience: a minimum of two (2) years of experience operating or managing markets in Juba, Nimule or within South Sudan. Agricultural market experience is preferred. Experience managing other large-scale businesses with important logistical components will also be considered.
- Company's profile.

## **8. TECHNICAL REQUIREMENTS**

The Contractor shall submit the following to UNIDO for review and approval prior to any installation and construction:

1. Insurances for property, workers and third party. The contractor must be insured against damage and loss of property during operations, due to various factors such as natural disaster and civil unrest. All workers at the site should also be insured against injury and loss of life.

## **9. LIST OF ANNEXES**

- Annex I – Management Plan (suggested contents)
- Annex II – Hygiene and Sanitation Schedule
- Annex III – Standard Sanitary Operating Procedures: Responsibility of the Market Management
- Annex IV – Business Plan (suggested template)
- Annex V – Data collection Standard Operating Procedure (SOP)
- Annex VI – Market Floor Plan

## **ANNEX I: MANAGEMENT PLAN (SUGGESTED TEMPLATE)**

### **A. GENERAL REQUIREMENTS**

### **B. OPERATIONAL REQUIRMENTS**

B.1. SSOPs - to be provided by the project

B.2 Machineries and Equipment – care, maintenance and repair schedules. Sourcing of spare parts and repair services/tools.

B.3 Building Maintenance – care, maintenance and repair schedules. Sourcing of spare parts and repair services/tools.

### **C. ADMINISTRATION**

C.1 Organizational Structure

C.2 Duties and Responsibilities

C.3 Policies and Procedures

## Annex II: Hygiene and sanitation schedule

### FISH MARKET HYGIENE & SANITATION - MONITORING SCHEDULE

**WEEK STARTING:**

	RESPONSIBILITY	FREQUENCY	MON		TUES		WED		THURS		FRI		SAT		SUN	
			COMP	CHECK	COMP	CHECK	COMP	CHECK	COMP	CHECK	COMP	CHECK	COMP	CHECK	COMP	CHECK
MARKET FLOORS	MARKET	D														
MARKET WALLS	MARKET	D														
STALLS CLEANED	TRADERS	D														
CEILINGS & LIGHTS	MARKET	W														
STORES	MARKET	W														
OUTSIDE MARKET	MARKET	W														
WASTE REMOVED	MARKET	D														
TOILETS	MARKET	D														
EQUIPMENT	MARKET	W														
RAT TRAPS	MARKET	D														
INSECT TRAPS	MARKET	D														

**D = DAILY W = WEEKLY**

## **ANNEX III: Standard Sanitary Operating Procedures (SSOP): Responsibility of the Market Management**

### **III. A: Cleaning and sanitation outside market SSOP**

#### **Background**

The outside area of the market within the boundary of the market should be kept free of litter, waste materials and vegetation. Keeping the area outside the market clean reduces the risk of dirt entering the market area and of pests. Fish waste and rubbish attract flies and rats. Vegetation harbours flies and other insects. This procedure describes how to keep the outside of the market clean.

#### **Responsibility**

- Market staff

#### **Equipment & materials**

- Plastic litter bag
- Strong floor brushes
- Potable (clean) water supply and hose
- Protective gloves
- Waterproof protective footwear/boots
- Water proof protective aprons
- Shears for cutting vegetation

#### **Instructions/procedure**

1. Starting at the main entrance, walk clockwise round the outside of the market picking up any litter or other waste materials. Put the waste into a plastic bag. Pay special attention to the waste collection area.
2. Dispose of any waste in the proper waste bins outside of the market.
3. Repeat the walk around the market this time removing any vegetation that should not be growing in the market area.
4. Dispose of any vegetation in the appropriate waste bin outside the market.

5. Sweep the outside market area and place any waste materials in the proper waste bin.
6. Hose down the outside areas and leave to dry.
7. Hose down and clean waste collection area making sure there is no waste left outside of the bins.
8. Disinfect the waste collection area using a strong disinfectant solution.
9. Carry out the cleaning process at the end of every working week after or before market hours.

### **Monitoring**

- The market manager or hygiene officer should be responsible for verifying that proper cleaning has been undertaken. They can do this through observation, smell and touch.
- Market managers visually inspect the outside and inside of the market as well as equipment, after cleaning has taken place at the end of the working week.

### **Corrective Action**

- Re-wash or clean dirty surfaces and equipment not properly cleaned.
- Follow manufacturer's label instructions for mixing sanitizer level to the correct concentration.

## **III. B. Cleaning and sanitation inside market SSOP**

### **Background**

Keeping the market clean reduces the risk of cross contamination of fish with bacteria and dirt and reduces pest levels. This procedure outlines the characteristics of proper three stage cleaning and sanitizing procedure to be used for floors, surfaces, rest rooms etc in the fish market area. This procedure will minimise the risk of contamination of fish and ice by biological, chemical and physical hazards.

### **Responsibility**

- Market staff

### **Equipment & materials**

- 3 large buckets or two buckets and hose pipe water for rinsing
- Strong floor brushes
- Strong hand brushes
- Detergent
- Disinfectant
- Potable (clean) water supply
- Protective gloves
- Waterproof protective footwear/boots
- Water proof protective aprons
- Duster
- Step ladder
- Cloth

### **Instructions/procedure**

#### Roof and beams and lights

1. Starting at one end of the market hall using the duster and step ladder, brush any dust or dirt off the roof beams and from the inside of the roof.
2. Wipe the strip lights with a dry cloth.

3. Continue until all the beams and inside of the roof and lights have been cleaned.
4. Carry out the cleaning at the end of the working week before the market surfaces are to be cleaned.

#### Dry stores and other areas of the market

1. Assemble the equipment and materials needed for cleaning.
2. Remove as much equipment from storage areas and other area as possible to make cleaning easy.
3. Dust or brush walls and upper surfaces.
4. Sweep floors and collect sweepings at the entrance and put these into a bin.
5. Empty the bin into a large bin at the market waste point.
6. Carry out cleaning at the end of the working week before the market hall is cleaned.

#### Floors and other surfaces

1. Assemble the equipment and materials needed for cleaning.
2. Make up three buckets of solution: clean water and detergent, clean water only, clean water and disinfectant. Follow instructions on the manufacturer's label for solution preparation and use. DO NOT use more sanitizer than called for by the instructions.
3. Soak all surfaces with clean water to loosen any dirt, fish waste using hosed water supply
4. Starting at one end of the market hall scrub all surfaces with detergent and water using the hand or floor brush to remove waste and dirt from the surfaces working towards the other end of the market hall.
5. Collect any solid waste and put it into a bin or bucket to be emptied into a bin at the market waste point.
6. Rinse off the detergent and dirt with hose water supply.
7. Soak all surfaces with the disinfectant solution for 15 mins to kill any remaining bacteria.
8. Rinse off the disinfectant solution using hosed water supply and leave the surfaces to dry.
9. Clean the brushes and any other cleaning equipment.

10. Dispose of any remaining solutions by pouring them down the drain in the market.
11. Put the cleaning equipment and materials into a proper store.
12. Carry out cleaning at the end of the working day, every day after working hours.

Equipment (e.g. fish boxes, waste bins, sinks)

1. Assemble the equipment and materials needed for cleaning.
2. Make up three buckets of solution: clean water and detergent, clean water only, clean water and disinfectant. Follow instructions on the manufacturer's label for solution preparation and use. DO NOT use more sanitizer than called for by the instructions.
3. Soak the equipment in clean water to loosen any dirt, fish waste etc.
4. Scrub the equipment with detergent and water using the hand brush to remove waste and dirt from the surfaces.
5. Rinse off the detergent and dirt with clean water.
6. Soak the equipment with the disinfectant solution for 15 mins to kill any remaining bacteria.
7. Rinse off the disinfectant solution and leave the equipment to dry.
8. Store the equipment in a safe clean place until required.
9. Dispose of the waste water and solutions by pouring them down the drain in the market.
10. Put the cleaning equipment and materials into a proper store separate from fish.
11. Carry out cleaning of large equipment at the end of the working day, every day or more frequently when the equipment needs cleaning or you have time to do the cleaning.
12. Carry out cleaning at the end of the working day, every day.

**Monitoring**

- The market manager or hygiene officer should be responsible for verifying that proper cleaning has been undertaken. They can do this through observation, smell and touch.

- Market managers visually inspect cleaned and sanitized surfaces and equipment for any visible dirt.

**Corrective Action**

- Re-wash or clean dirty surfaces and equipment not properly cleaned.

### **III. C. Solid waste disposal by market SSOP**

#### **Background**

The process is necessary to ensure that market waste is disposed of safely, to reduce the risk of cross contamination and pests. Accumulation of solid, semi-solid or liquid wastes should be minimized to prevent contamination. Waste is likely to be that of fish origin, non-toxic solid waste such as broken fish boxes, baskets etc. Part of this waste may be recycled. However, the actual processing should not take place inside the market. Disposal of this waste may be handled by municipal waste services. Toxic solid waste comprises of batteries, mechanical parts, oil and paint cans, solvents, etc.

Waste areas should be sited 10 metres from the main building in order that any pests that may be attracted are kept at a distance. Waste area flooring should be recessed to create a bunded effect and should have a sufficient gradient to allow good run off of water to drainage points.

#### **Responsibility**

- Market management

#### **Equipment & materials**

- Waste collection bins – different colours for different types of waste for inside and outside the market
- Bulk waste containers
- Cleaning equipment and materials

#### **Instructions/procedure**

1. At the start of the working day sufficient clean, empty labelled waste bins for non-fish waste should be inside and outside the market and in the toilet area, at the entrance and exits, and in hand washing areas.
2. At the end of the working day the bins inside and outside the market should be emptied into the large waste bins outside the market. These large bins are to be emptied by the waste disposal service provider (e.g. local council or other)
3. Where appropriate, containers for offal and waste material should be clearly identified, suitably constructed with a fitted lid and made of impervious material.

4. When buckets are full the waste for removal from the site is to be emptied into larger market receptacles (bins) for disposal by the service provider.
5. Waste bins must be cleaned at the end of the working week.
6. Large waste bins emptied by the service provider should be cleaned at the end of the working week.
7. An agreement between the market management and a waste disposal service provider should be established and maintained. The service provider to be responsible for regular collection of waste from the market.
8. Fish offal and waste should be removed from the market on a daily basis.
9. Non-toxic waste should be removed on a weekly basis.
10. Any hazardous waste should be removed on weekly basis.
11. Septic tank should be emptied according to use and capacity.

### **Monitoring**

- Market managers should observe waste disposal activities and equipment on a daily basis.
- The waste holding area should be assessed for cleanliness and the condition of the large waste containers checked on a weekly basis.
- The effectiveness of the waste disposal service provider should be monitored. Is waste being removed from the market as and when agreed?

### **Corrective Action**

- Sufficient bins for different types of waste must be always available.
- Replace damaged and ineffective waste bins as and when required.
- Rewash any bins that have not been adequately cleaned.
- Discuss any issues with the service provider.

### **III. D. Pest control market SSOP**

#### **Background**

The market should have an active, integrated pest management program to eliminate harbourage areas and prevent pest entry into the facility, ongoing monitoring for the presence of pests and corrective action when pests are identified and found within the food establishment. The main pests at the market are likely to be rats, bats cockroaches and flies. Fish storage areas may also be prone to insect infestation by beetles.

Knowledge of the site, its history and potential for infestation through regular and thorough inspections is important. Staff training should include identification of common pests and indications of pest infestations.

#### **Responsibility**

- Market management and staff

#### **Equipment & materials**

- Rat poison and bait shields
- Fly traps
- Insecticide treatment

#### **Instructions/procedure**

- The market grounds and interior areas should be kept free of litter, waste, vegetation, pools of water and other conditions that may attract pests.
- Keep outer facility doors closed when not in use.
- Training should be given to the personnel concerned. As a minimum, all market personnel should be aware of the pests that they are likely to encounter in the market and the importance of pest prevention.

#### Rats

1. At least 5 poison baited pipes/feeding boxes should be placed at key points around the outside of the market building. Good places are at the junction between the ground and bottom of the side walls and behind the toilet block.
2. Draw a map of the market and show where the traps are.
3. Check the boxes every day and replace poison bait as required.

4. When handling poison where protective clothing and refer to the manufacturers guidelines.
5. Keep the rat poison in a strong protective container in a designated store meant for chemicals.
6. Remove any dead rats immediately and put in the main market waste bin.
7. As well as good hygiene and sanitation practice, make sure there are no pools of water either inside or outside which can be a source of drinking water for rats and other pests.

#### Flies and cockroaches

1. Fly and insect traps should be placed within the market hall.
2. Traps should be inspected daily and according to the manufacturer's guidelines.
3. Replace traps as and when required.
4. Replacement traps should be kept in the proper storage area.

#### Insect infestation in stores

1. Make sure that dried and smoked fish entering the market does not contain insects.
2. If insects are found in storage areas or on stored fish, remove all fish from the store.
3. Dispose of the fish removed from the store using the best means possible.
4. Sweep out the store and treat the sweepings with an appropriate pyrethroid insecticide using the manufacturer's guidelines.
5. Examine the empty store for signs of insect infestation.
6. Treat areas of the store where insects are seen with an appropriate pyrethroid insecticide using the manufacturer's guidelines.
7. Where protective clothing and keep insecticides in a lockable store away from fish and fish products.
8. Reuse the store when there are no signs of insects making sure there is no possibility of stored fish coming into contact with insecticide.

#### **Monitoring**

- Market staff should:
- Monitor the outside and inside of the market including traps and stores for evidence or presence of rats, birds or insects on a daily basis.

**Corrective Action**

- Pest treatments may be changed or intensified if re-occurring problems are identified.
- Actions should be designed to respond to the results and recommendations of inspections.

## **ANNEX IV: Business Plan**

Narrative Description of the Business Plan

Annual Target Volume

Year 1  
Year 2  
Year 3

Annual Projected Income Statement

Year 1  
Year 2  
Year 3

Statement of Cash Flows

Year 1  
Year 2  
Year 3

Annual Statement of Financial Condition

Year 1  
Year 2  
Year 3

Contingencies

## Annex V: Data collection Standard Operating Procedure (SOP)

### Background

Informed decision-making requires accurate data and information. Data on the volumes of fish arriving at the market will assist decision-making regarding fisheries management and food security. It will also assist revenue collection. This procedure is designed to assist the collection of data fresh fish and processed fish arriving at the market.

### Responsibility

- Market management and staff

### Equipment & materials

- Weighing scales
- Clipboard
- A4 data collection sheets
- Pens
- Document storage
- Computer and relevant software

### Instructions/procedure

1. Ensure that all fish and fish products to enter the market through the designated entrance.
2. Carry out a visual inspection of product on arrival in the inspection area.
3. Any substandard products should be rejected and disposed of accordingly.
4. Using the calibrated market scales way consignments of fresh fish or processed fish.
5. Record the results on the daily data recording sheets (see table below).

DATE:						
Trader	Origin (location)	Stall holder #	Main species	Fresh/Smoked/Dried	Weight (kg)	Average Buying Price (SSP)

6. Enter the data from the recording sheet into the computer.
7. Store the recording sheets in a file in the management office.
8. Backup of computer data to be made at the end of each working day.

### Monitoring

- Market management should ensure that data is collected on a daily basis and records are stored properly in the office.
- Hard copy data should checked with data in the computer system for errors.
- Inspectors to check the records and data during inspections.

### Corrective Action

- Data collection or entry errors to be addressed by additional supervision or training.

# Annex VI: Market Floor Plan

