

## Smoked Fish Processing unit for SMEs

Smoked fish has high consumer demand over salted dried fish and have much potential to develop as small and medium scale industry in Sri Lanka. But, scientific surveys have found that quality of smoked fish products are not in acceptable level. Therefore, improvements in the processing methods of smoked fish are required in order to prevent contamination with unacceptable levels Polycyclic Aromatic Hydrocarbons (PAH) which are carcinogenic. Due to above reasons, National Engineering Research & Development (NERD) Centre in collaboration with National Aquatic Resources Research and Development Agency (NARA) has developed a smoked fish processing unit to minimize Polycyclic Aromatic Hydrocarbon (PAH) contaminations of smoked fish at safe levels.

### Advantages

- Ability to produce high quality smoked fish because smoke is cleaned before entering to the chamber
- Less PAH contamination in smoked fish
- Easy to control heat and smoke separately because heat and smoked are supplied separately
- Portable unit
- Made from food grade stainless steel
- Less fuel usage
- High productivity due to minimum post-harvest losses
- Cost effectiveness
- Easy maintenance
- Simple technology and could be fabricated with limited facilities

### Features of the unit

Capacity	- 25-30 kg of raw fish (17-20kg of finished product)
Fuel used for drying	- Saw dust
Wood used for smoking	- Cinnamon wood
Fish types	- Both marine & inland fish
Smoking/drying time duration	- 3hr (depends on the moisture content of final product)
Final moisture content of the product-	58-62%
Product shelf life	- 14 days in refrigerated conditions ( $2 \pm 1$ °C) and 3 months in frozen conditions ( $-20 \pm 1$ °C).

All the food touching parts are made using food grade stainless steel



Smoked fish processing unit



Brined & seasoned fish ready for smoking



Smoked fish



Some food items that can be produced using smoked fish