# **Training Module - Fuel Efficient Stove**

# Introduction/Background

People in erstwhile FATA mainly depend on wood as main source of fuel. Mostly female are involved in collecting fire wood.

Traditional stone or clay stoves burn more wood and produce a lot smoke which create several health related problems particularly for the women doing cooking as well as children and aged family members present in the vicinity. It also create environmental issues and according to the World Health Organization, 4.3 million people die a year due to air pollution caused by the inefficient use of solid fuels.

The picking of fire wood is a laborious job and consumes several hours a day. Mostly women are responsible for collecting wood for which they have to walk long distances on foot and bring the wood on head. It affects their daily routine life. Dependence on wood for fuel also results in the deforestation.

# Objective:

The project will provide education and support to the selected communities in the preparation and using of fuel efficient stoves that have several social, economic and environmental benefits.

### What is FES?

Improved cooking stove is a device that is designed to consume less fuel and save cooking time, convenient in cooking process and creates smokeless environment in the kitchen. Generally, the appliance is made of compressed mud, having two/three cooking pods. A stove is an enclosed space in which fuel is burned to provide heating to the pot placed without damaging the environment due to least amount of smoke produced or a cooking stove is a device in which fuel is burnt to cook food .

### **EXPECTED OUTPUTS OF THE ACTIVITIES**

#### 1. Time saving

FES would save time of the females as compared to the traditional stone stove. The extra time could be utilized by the women in looking after their kids or engaging in homebased livelihood activities e.g embroidery, kitchen gardening, livestock raring or other productive activities.

#### 2. Fuel Saving

As FES uses less fuel, there could be significant reduction in fuel utilization which has its own economic and environmental benefits for the community

#### 3. Cash saving

Community members could save cash as per reduced consumption of wood for cooking and heating and the extra cash could be utilized on other important things like children education, health, quality food and clothes.

#### 4. Sale of stove/ Livelihood source.

Local people/women could make stoves at their houses and sell them in their localities which would create a good livelihood opportunity them

#### 5. Environmental protection

Efficient use of fire wood would decrease demand for wood, thereby decreasing the current deforestation rate which will further lead to better environment

#### 6. Reduction in health related issues.

Less smoke and less particle emission would decrease carbon related health issues

## **IMPLEMENTATION**

After BBCM, VDCs are formed. Participants have been selected which would be further validated before start of the training.

Step by step activity detail is as under:

| S.No | Step/Day    | Activity  | Remarks |
|------|-------------|---|---------|
| 1    | Step 1      | 1. Introduction to the training course, resource person |         |
|      | (Day 1-2)   | and participants  |         |
|      |             | 2. Objectives of the training                           |         |
|      |             | 2. Learning outcomes                                    |         |
|      |             | 4. Mud watering   |         |
|      |             | 5. Material collection for demos and stove making       |         |
| 2    | Step 2      | 1. Dividing the training participants in sub-groups for |         |
|      | (Day 3)     | practical work  |         |
|      |             | 2. Preparation/Demonstration of "Mould" for FES         |         |
|      |             | 3. Practical demonstration on fuel efficient stove      |         |
| 3    | Step 3      | 1. Follow up of the activities                          |         |
|      | (Day 4 – 9) | 2. Rotation of stove design house to house              |         |
|      |             | 3. Technical inputs during making of stove              |         |

| 4. Preparation of fuel efficient stoves by all women |
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| upon completion of training                          |
| 5. Maturity stage, ensuring the stove utilization    |