

## **Scheme for Salt Workers-Training for Technology Upgradation.**

### **INTRODUCTION**

Salt Commissioner's Organisation (SCO) has been making concerted efforts to educate salt manufacturers in general and small salt producers in particular for improving the quality of salt to meet the stringent standards of industrial and edible salt, to compete in the domestic and international market. Most of the Salt workers in Odisha, Andhra Pradesh, northern part of Tamil Nadu, Karnataka, Mumbai and south Gujarat still follow the old traditional methods of producing salt. It is seen that these salt works are mostly constructed on SCO land and located in difficult climatic conditions. The salt workers have a definite mindset about the way salt is to be produced and are not willing to change it. They are still following primitive methods and layout of the Salt works is out dated. It is necessary to demonstrate before them to produce good quality salt with high yield per acre under the given climatic conditions. SCO has set up Model Salt Farms (MSF) in Rajasthan, Odisha and Tamilnadu in collaboration with Central Salt and Marine Chemicals Research Institute (CSMCRI), Bhavnagar and the concerned State Governments. These MSFs have successfully demonstrated the technicalities of production of good quality salt. Therefore, it is felt that if proper training is imparted to salt producers and expose them to the modern technologies, they will be able to produce good quality salt in a cost effective manner.

### **2. OBJECTIVE**

The main objective of the scheme is give training to salt workers to inculcate modern salt technology amongst salt producers who are hitherto producing salt with the ancient methods. Adoption of modern technology would lead to improvement in terms of quality and quantity of salt. Training modules will be developed in consultation with the prominent salt producers, salt technologists and CSMCRI, Bhavnagar, keeping in view the needs of the specific area.

### **3.. SCOPE OF THE SCHEME**

In the beginning, focused attention will be paid to all difficult salt producing centres, where quality of salt produced is poor and productivity is low. But, the facility would not be denied to the salt works located in better climatic conditions, but facing problems in producing good quality salt, due to inferior quality of sub soil brine (e.g. salt works located in inland belt in Gujarat and Rajasthan).

#### 4. MODUS OPERANDI

4.1 The scheme will be implemented in two stages. In the first stage, training programme will be conducted by the CSMCRI, Bhavnagar for the master trainers. These master trainers will be selected from the officials of SCO/salt cluster leaders. Two training programmes comprising 20 trainees for a period of 5 days each will be conducted by CSMCRI. During the training, the master trainers will receive training on the following subjects:

1. Chemistry of Salt manufacturing-and phase equilibrium.
2. Design and layout of Salt Works
3. Washing of solar salt
4. Value addition through bittern processing
5. Semi mechanization of solar salt works
6. Analytical techniques and soil analysis.
7. Fortification of Solar salt with iron and iodine
8. Industrial Safety and Hazard Management in Salt Industry

[All the above topics will be taught at elementary and advanced levels]

4.2 The expenditure for imparting training to each batch will cost Rs.5.00 lakh.. The total amount of training for the master trainers will be Rs.10.00 lakh for the whole Plan Period. The amount will be utilized for preparation , distribution of training material, boarding lodging, visit to nearby salt works and payment of fees to the faculties of the CSMCRI.

4.3 In the second stage, these master trainers will impart training to salt workers and artisans in their respective States in local language. 20 training programmes of

six days duration will be conducted every year. Each batch will consist of 30 salt workers and artisans, to be selected from the industry.

4.4 The training would include basic knowledge about brine, use of Beaume's Hydrometer in determination of density of brine, preparation of salt crystallizer beds, charging of brine in various compartments of the salt works, factors affecting salt production, use of implements, extraction and storage of salt and chemical analysis of salt.

4.5 The trainees would be eligible for rail fare by sleeper class from place of working/residence to place of training and a sustenance allowance of Rs 500 per day. They will also be provided the course material.

4.6 The trainees would be provided free conveyance for field visits such as chemical laboratory, Model Salt Farm and salt producing center of the area including salt iodization unit/ crushing unit/ refinery/packing unit, etc.

4.7 The cost of conducting each training programme would be Rs.3.00 lakh and conducting sixty training programs would be Rs 1.80 crore (entire cost to be borne by SCO).

4.8 The implementation of the scheme will be evaluated periodically and remedial action would be taken by the implementing agency. The Nodal Agency imparting of training would be the Regional Salt Officer.

## 5. **SELECTION OF TRAINEES**

5.1 Each training program would be chalked out based on the need of the salt producing cluster, from which the trainees are deputed. While choosing the cluster, priority should be given to the areas where quality of salt is poor and productivity is low.

5.2 An open house discussion on the last day of the training program, which may be attended to by the trainees, local official of SCO, faculty members/master and

prominent salt producers to assess the impact of training programme and level of absorption by the trainees, shall be carried out. The outcome of the discussion may be used for further improving training modules and methods of instructions for the benefit of the salt workers. Efforts shall be made to impart training in local language and as per local conditions of salt production..

## 6. MONITORING

6.1 The implementation of both the components of the Scheme will be monitored by a Central Level Committee (CLC). The Committee would be chaired by Joint Secretary, DPIIT and will consist of:

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|--|----------------------------|
| a) The Salt Commissioner   | Member                     |
| b) Director (Finance), DIPP  | Member                     |
| c) Director (CSMCRI)   | Member                     |
| d) Industry Commissioner/Secretary to the concerned State Government | Member/<br>Special invitee |
| e) Deputy Secretary (Salt), DIPP                                     | Member<br>Secretary        |

6.2 Suitable State/Regional Level Monitoring Committee will be institutionalized in the scheme.

## 7. COST AND FUNDING PATTERN

(i) Estimated cost of 2 training programmes for master trainers @Rs.5.00 lakh per training comes to a total of Rs.10 lakh. The break-up of the expenditure is as follows:

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| 1. Travelling expenses<br>(to be paid on factual basis) | Rs.0.75 lakh |
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2, Training materials:	Rs.0.75 lakh
3. Boarding and lodging:	Rs.1.50 lakh
4. Visit to nearby salt works:	Rs.0.50 lakh
5. Man days charges (Scientists CSMCRI):	Rs.1.50 lakh

Total Rs.5.00 lakh

- (ii) Estimated cost of 60 training programmes for salt workers/artisans @Rs.3.00 lakh per programme comes to a total of Rs.1.80 crore. The break-up of expenditure of each programme is as follows:

<b>S. No.</b>	<b>Items</b>	<b>Approved Estimate in Rs.</b>
1	Study material to trainees in Regional language	10,000
2	Trainees sustenance Allowance(Rs.500X90X6days)	90,000
3	Working lunch/tea/snacks etc. for 30 trainees and 4 to 5 faculty	30,000
4	Display Banners (3 Nos.)	2,000
5	Charges for incidental expenses for inaugural and valedictory sessions	7,000
6	Van hiring charges for external visits	20,000
7	Van hiring charges for Internal Salt Works visits	15,000
8	Average travelling expenses for 30 trainees for 6 days-100x30x6	18000
9	Travelling expenses for faculty	22000
10	Honorarium to faculty (5 faculty x 6days)-500x5x6	15000
11	Travelling expenses for faculties of CSMCRI, Bhavnagar, if attended	55000
12	Certificate to trainees	
13	Public Address System, Projector for PPT presentation etc.	10000
14	Misc. Charges, if any	5000

	<b>Total</b>	<b>3,00,000</b>
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8. RELEASE OF FUNDS

8.1 Respective Regional Officer shall place the proposal for conducting training and calendar of training schedule which will include the name of faculties to be invited before the SLC in the month of April and will conduct training program as per the advice of the SLC.

8.2 The expenditure for conducting training program will be sanctioned by the Salt Commissioner subject to availability of funds and advice of the CLC.

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