

**GOVERNMENT OF INDIA  
NON-CONVENTIONAL ENERGY SOURCES  
LOK SABHA**

UNSTARRED QUESTION NO:934  
ANSWERED ON:07.12.2004  
SOLAR DRYERS  
Adhalrao Patil Shri Shivaji

**Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:**

- (a) whether solar dryers are in operation in the country for making Nanunka-Bedana from grapes also for drying vegetables;
- (b) if so, the drying capacity in ton per hour and the tentative cost per ton;
- (c) whether the Government propose to promote the use of solar dryers in the country;
- (d) if so, whether the cost of the unit is affordable to farmers; and
- (e) if so, the details thereof?

**Answer**

MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (INDEPENDENT CHARGE) (SHRI VILAS MUTTEMWAR)

(a): Solar dryers have been developed and are commercially available for drying various vegetables and fruits including grapes for making raisins (Manuka-Bedana). They are in operation in a few areas of the country.

(b): Cabinet type Solar dryers are available in small sizes varying from 5 Kg. to 100 Kg. per batch capacity. The solar drying period per batch varies from 20 to 24 sunny hours depending upon the initial moisture content of the material to be dried. The cost of a typical 50 Kg. per batch capacity cabinet dryer is in the range of Rs. 60,000/- to 70,000/- (working out to Rs. 12 to 14 lakhs per ton per batch capacity). Larger capacity industrial solar drying systems which work together with conventional fuels are also available in the country. They cost about Rs. 7.5 lakhs per ton per batch capacity.

(c): The Ministry of Non-Conventional Energy Sources is promoting the use of solar dryers in the country through information dissemination and a few demonstration projects. Commercial solar drying projects are also eligible for interest subsidy under a soft loan scheme of the Ministry. The Ministry is also supporting R&D efforts for the development of new technologies and improvement in the existing ones.

(d)&(e): The cost of the solar dryers is affordable to farmers considering that controlled solar drying is faster than open sun drying which helps the farmers to increase their production capacity for drying the grapes for making raisins. In addition, the product is of higher quality, fetching better prices for the farmers. It is estimated that the cost of Rs. 60,000/- to 70,000/- for a 50 Kg. per batch capacity solar dryer can be recovered by the farmer in about 3 years.