

RAJYA SABHA

Wednesday, the 26th February, 1975/the
7th Phalguna, 1896 (Saka)

The House met at eleven of the clock, Mr.
Deputy Chairman in the Chair.

ORAL ANSWERS TO QUESTIONS

•179. [Transferred to the 3rd March,
1975]

Use of Solar Energy and Energy Derived • from Recycled wastes for Food Production

-180. SHRI R. P. SINGH DEO :
SHRI LOKANATH MISHRA :
SHRI M. P. VARMA : SHRI
SITARAM SINGH :

Will the Minister of AGRICULTURE
AND IRRIGATION be pleased to state :

(a) whether Government's attention has
been drawn to a study made by scientists
of the Indian Agricultural Research Insti-
tute to the effect that there is large scope
for augmenting energy supply for food
production by the use of solar energy and
energy derived from recycled wastes; and

(b) if so, what steps Government pro-
pose to take in this regard ?

THE MINISTER OF AGRICULTURE
AND IRRIGATION (SHRI JAGJI VAN
RAM) : (a) and (b) A statement is placed on
the Table of the Sabha.

Statement

(a) In food production, solar energy is
converted by photo-synthetic process of crop
plants to chemical energy. Thus, all efforts to
raise the per hectare yield of crops including
multiple cropping are in the direction of
efficient conversion of solar energy into food
production. Except this general
conversion and in post-harvest drying of
crops, no other studies have been done by
the IARI to utilize solar energy in crop
production. However, work has been done
on the recycling of the following wastes as
manure.

(i) *Spent slurry*.—During fermentation in the
gas plant, about 30 % of the added cow
dung is converted into methane gas and
about 70% remains as residue for use as
manure. Experiments have been conducted
at IARI on the disposal and utilisation of
this spent slurry. Analysis of the slurry
obtained from the Institute Dairy has shown
that it is superior even to farm yard manure
in its effect on crop growth and also in its
power to improve the soil physical
properties.

(ii) *Manure from vast-s*.—Experiments
have been conducted at IARI to chemically

The Question was actually asked on
the floor of the House by Shri K. P. Singh
Deo. 1—979RSS/74

prepare manure from a variety of organic
wastes viz., animal bones, hair and wool
wastes, leather waste etc. Studies on the effect
of these manures on plant growth are in
progress.

Experiments conducted at IARI have
shown that the energy obtained from a family
sized Village Model Gas Plant producing
about 100 cft. gas per day can be
used for cooking, lighting and running
engines. For cooking, some cheap and simple
burners from locally inexpensive materials
have been designed. For lighting purposes
suitable gas mantles are available in the
market. For running engines, however, certain
modifications have to be
introduced in the petrol engine to make
it run on methane gas.

(b) Department of Agriculture has
launched a programme of the cultivation
of High Yielding Varieties including multi-
crop cropping in irrigated and assured rain-
fall areas. Through these programmes,
amongst other things, the efficient conver-
sion of solar energy in crop production can be
achieved.

For the recycling of wastes the following
programmes have been taken up under
Central sector :

(i) Utilisation of urban wastes through
conventional and mechanised composting
systems;

(ii) Setting up of Gobar Gas Plants; and

(iii) Sewage and sullage utilisation for
irrigation.

Additionally, the State Governments have
since long been popularising the utilisation of
agricultural wastes and other special type of
wastes through composting.

SHRI K. P. SINGH DEO : Sir, solar
energy is one of our most abundant resources,
and it is a renewable source of energy, I would
like to know whether Government have
provided any outlay in the coming Plan or
whether they have any programme of research
on solar energy so that storage for solar
energy is possible, as is done in Canada,
France and other countries.

SHRI JAGJI VAN RAM : Now, Sir,
various experiments are being carried on,
and whatever funds the Indian Council
of Agricultural Research require, they will
get for this research.

SHRI K. P. SINGH DEO : My second
question is that the National Committee on
Science and Technology is believed to have
given a blueprint for research and
development of solar energy, specially for
application into the agricultural field. I would
like to know whether in a recent

conference held in Delhi any decision was taken for the location of a centre here in India for the application of and research on solar energy; and if so, what are the steps taken by the Government to see that it is fulfilled.

SHRI JAGJIVAN RAM : Sir, whatever research is carried on is in complete collaboration with the scientific institutions, and as I have said, research is already being carried on by the Indian Council of Agricultural Research, with a view to the application of solar energy for agricultural purposes. In respect of use of agricultural waste, the most important is the utilization of gobar gas and also of compost manure, and green manure.

*181. [The questioners (Shri Bezawada Papi Reddy and Shri Kanchi Kalyana Surtm daram) were absent. For answer vide col, 41 infra)

प्राथमिक तथा माध्यमिक शिक्षा का अधिग्रहण

- *182. श्री नागेश्वर प्रसाद शाही :
श्री जगदीश जोशी :†
श्री कल्प नाथ :
श्री नत्थो सिंह :
श्री गुणानन्द ठाकुर :

क्या शिक्षा-समाजक कल्याण तथा संस्कृति मंत्री यह बताने की कृपा करेंगे कि सरकार नई दिल्ली में निजी संस्थाओं से प्राथमिक तथा माध्यमिक शिक्षा के कार्य को कब तक अपने हाथ में ले लेने का विचार रखती है ?

Taking over of Primary and Secondary Education

- *182. SHRI NAGESHWAR PRASAD SHAHI * SHRI JAGDISHJO SHI :†
SHRI KALP NATH : SHRI
NATHI SINGH : SHRI
GUNANAND THAKUR :

Will the Minister of EDUCATION, SOCIAL WELFARE AND CULTURE be pleased to state by when Government propose to take over the primary and secondary education from the private organisation in Delhi ?]

शिक्षा और समाज कल्याण मंत्रालय तथा संस्कृति विभाग में उपमंत्री (श्री

†The question was actually asked on the floor of the House by Shri Jagdish Joshi.

†[] English translation. ", i

डी० पी० यादव) : दिल्ली के ऐसे प्राथमिक तथा माध्यमिक स्कूलों की अपने नियंत्रण में लेने का सरकार का कोई विचार नहीं है जिनका प्रबन्ध निजी तौर पर चलाया जा रहा है तथापि दिल्ली स्कूल शिक्षा अधिनियम 1973 की धारा 20 के उपबंधों के अधीन ऐसा किया जा सकता है ।

†[THE DEPUTY MINISTER IN THE MINISTRY OF EDUCATION AND SOCIAL WELFARE AND IN THE DEPARTMENT OF CULTURE (SHRI D. P. YADAV) : Government have no proposal under their consideration for taking over the privately managed Primary and Secondary Schools in Delhi except in accordance with the provisions' contained under Section 20 of the Delhi School Education Act, 1973.]

श्री जगदीश जोशी : अध्यक्ष महोदय, क्या मंत्री जी को इस बात की जानकारी है कि कई राष्ट्र-विरोधी और समाज विरोधी और साम्प्रदायिक तत्व भी प्राथमिक और माध्यमिक शिक्षा के क्षेत्र में काफी प्रभाव रखते हैं ? ऐसी सारी प्रक्रियाएं राष्ट्र-हित विरोधी हैं, इसको मद्दे नजर रखते हुए देश की सम्पूर्ण प्राथमिक और माध्यमिक शिक्षा के अधिग्रहण पर क्या सरकार गौर करेगी ?

श्री डी० पी० यादव : अध्यक्ष जी, शिक्षा राज्य का विषय है । इसे राज्य सरकार ही कर सकती है । हम से जो मदद होगी हम करेंगे ।

श्री जगदीश जोशी : अध्यक्ष महोदय, अगर कोई राज्य सरकार पूरी तरह से प्राथमिक और माध्यमिक शिक्षा को अपने हाथ में लेती है तो केन्द्रीय सरकार का क्या नियम है, उसको कितने प्रतिशत अनुदान उसके लिए दिया जाता है ?

श्री डी० पी० यादव : अध्यक्ष महोदय, केन्द्रीय सरकार उसमें कोई अनुदान नहीं देती ।

SHRI SARDAR AMJAD ALI : I would like to quote Article 45 of the Constitution to the hon. Minister ;