

RAJYA SABHA

Wednesday, the 26th February, 1975/the
7th Phalgun, 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 K. P. SINGH DEO :
SHRI LOKANATH MISRA :
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 JAGJIVAN
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-
ing 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 uti-
lisation 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 wastes*.—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.

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prepare manure from a variety of or-
ganic 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 pro-
ducing 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 avail-
able 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-
ple 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 uti-
lisation of agricultural wastes and other
special type of wastes through composting.

SHRI K. P. SINGH DEO : Sir since
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 JAGJIVAN 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 Sundaram) 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 नत्थी 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 JAGDISHJI 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

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 है, 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 :

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

‡[] English translation.