THE MINISTER OF STATE OF THE MINISTRY OF INFORMATION AND BRODCASTING (SHRI V.N. GADGIL):

(a) Yes, Sir. Unused frequencies are available in the Medium Wave band.

- (b) No Sir.
- (c) Depending upon the effectiveness of a satisfactory coverage on such frequencies, the availability of resources and other technical considerations, the remaining assigned frequencies will he utilized to the extent possible.
  - (d) Yes, Sir.
- (e) On certain frequencies, interference from stations in neighbouring countries has been observed. Technically, during night time, the propagation over the medium wave is able to travel long distances since the radio waves get reflected back to the earth from the earth's upper atmosphere. Interference therefore occurs to far off stations operating on the same or adjacent frequencies. This phenomenon should be occuring in the stations in other neighbouring countries also.

## Research on "No-Till Agriculture"

4196. SHRI SATYENDRA NARAYAN SINHA: Will the Minister of AGRICULTURE be pleased to state:

- (a) whether any research has been conducted on "no-till agriculture".
- (b) whether it has been found suitable in India; and
  - (c) if so, the details thereof?

THE MINISTER OF STATE IN THE DEPARTMENT OF AGRICULTURE AND COOPERATION (SHRI YOGENDRA MAKWANA): (a) to (c) Yes, Sir.

Research on no-till agriculture has been carried out at the Indian Agricultural Research Institute, New Delhi, Punjab Agricultural University, Ludhiana, Haryana Agricultural University, Hissar and Jawahar lal Nehru Krishi Vishva Vidyalaya, Jabal pur.

Experimental results do not clearly demonstrate its utility in all agro-climatic zones.

It, however, has the promise of reducing the time for field preparation and energy demand in agriculture provided water and nutrient supply is adequate and weed control is effective

The results from the Division of Agricultural Engineering of IAR1 do not show a definite trend of increase or decrease in yield. Three other studies on different rotations with zero-tillage have, however, shown that yields were as much as those with conventional tillage. The results from PAU from various trials on farmers' fields do not show any yield advantage from conventional tillage over zero-tillage.

It is considered that zero-tillage may be successful in lighter soils and in less weed intensive fields.

Large scale long duration field trials are required to establish successfully whether no-till agriculture would result in energy saving without lowering crop yields significantly. The suitability of no-till agriculture in dry land areas has also to be determined.

## Broadcast iong of News Bulletins

4197. SHRI CHINTA MOHAN: Will the Minister of INFORMATION AND BROADCASTING be pleased to state:

- (a) whether some of the news bulletines are broadcast throughout the country around 8.30 p. m. which is the prime listening time;
  - (b) if so, details thereof;
- (c) whether news bulletins in regional languages such as Telugu are broadcast around 2.30 p.m.;
- (d) if so, reasons for such disparity; and
- (e) whether Government will consider transfflission of all news bulletins in all languages at the same time or close to each other in different regions?

THE MINISTER OF STATE OF THE MINISTRY OF INFORMATION AND BROADCASTING (SHRI V. N. GADGIL):
(a) and (b) For news bulletins, the period