## Statutory Warning on Package of Pan Masala

1527. SHRI SHIKIHO SEMA: Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state.

- (a) whether the consumption of pan masala is injurious to health;
- (b) If so, whether Government propose to impose any Statutory Warning on every pack of pan masala; and
  - (c) If not, the reasons therefor?

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI NILAMANI ROUTRAY): (a) to (c). Gazette notification amending the Prevention of Food Adulteration Rules, 1955 requiring every package of pan masala to carry a warning stating thereby that chewing of pan masala may be injurious to health is under publication.

[Translation]

## Irrigation Scheme for Drought Affected Villages of Uttar Pradesh

1528. SHRI GANGA CHARAN LODHI: Will the Minister of WATER RESOURCES be pleased to state:

- (a) whether an Irrigation Scheme has been formulated for drought-affected villages of Charkhari regions in Hamirpur district of Uttar Pradesh;
  - (b) if so, the details thereof; and
- (c) the time by which it is likely to be implemented?

THE MINISTER OF STATE OF THE MINISTRY OF WATER RESOURCES (SHRI MANUBHAI KOTADIA): (a) to (c). Apart from Rajghat, Urmil and Moudaha projects, the State Government has farmulated Charkhari Dam Project at an estimated cost of Rs. 10.85 crores with ultimate potential of 1892 hectares for realisation of benefits in the Eighth Plan.

[English]

## Vectors Developed Resistance to Pesticides

1529. SHRI P.R. KUMARAMANGA-LAM: Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

- (a) whether Government have a list of various vectors found in India which have developed resistance to pesticides registered in India and if so, the details thereof indicating the names of pesticide vector and the level of resistance;
- (b) whether alternative technologies for vector control have been developed and if so, the details thereof;
- (c) whether pesticide resistance has been on the increase; and
- (d) whether any monograph has been brought out on the subject?

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI NILAMANI ROUTRAY): (a) Yes, Sir. The following vectors of human diseases have developed resistance to pesticides:—

	Disease		Malaria
<del></del>	Vectors SPP		Resistance status.
(i)	Anopheles culici	facles —	Both these species are resistant to DDT and HCH in major parts of the country.
(ii)	An. Stephensi —		Malathion resistance in An. culcifacies is restricted to most parts of Gujarat and Maharashtra and also in bordering districts of Andhra Pradesh, Goa, Karnataka and
	Madhya		Madhya Pradesh. An. stephensi has also showed triple resistance to DDT, HCH and Malathion in certain parts of the country.
(iii)	An. Annularis		Resistance to DDT has been reported from Panchmahal District (Gujarat), Dhanbad district (Bihar), and in some pockets in Delhi, Rajasthan, Madhya Pradesh, Uttar Pradesh & Tripura.
(iv)	An. fluviatilis		DDT resistance has been reported in Pandharpur Distt. (Maharashtra )
(v)	An. philip pinensis —		Reported to be resistant to DDt only in Assam.
			Other anopheline Vector species viz. An. Minimus, An. sundaicus, An. varuna and An. balabacensis balabacensis have not shown any resistance to the commonly used insecticides viz. DDT, HCH and Malathion.
	Filariasis	Culex quinque- fasciatus	Resistant to DDT, HCH and Malathion.
	Cutaneous leishmaniasis	Phlebotomus pap atasi	Reported to have developed resistance to DDT in someparts of Bihar, Gujarat and Delhi.
	Plague (i)	Xenopsvila cheop is	Resistant to DDT and to a lesser extent to HCH.
	(ii)	X. astia	
	Relapsing	Pediculus humanus humanus	Resistant to DDT

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Written Answers

Level of resistance is as per the WHO criterion and mosquitospecies with less than 80% mortality during the standard susceptibility test with particular insecticide, is considered to be resistant to the insecticide tested.

(b) Yes, Sir. The integrated bioenvironmental strategy for control of vectors has been successfully developed and is being field tested at several sites by the Indian Council of Medical Research. Field experiments have demonstrated that this strategy is feasible, cost-effective and socially acceptable. In this strategy, the malaria control is achieved by involving the communities in the control of mosquito breeding by employing simple methods of filling, levelling, draining and use of larvivorous fishes.

In addition to this strategy, other technologies have been developed for vector control. Expanded Polystyrene beads have been used in overhead tanks and wells to control mosquito breeding. Biological control agents like larvivorous fishes, (*G. affinis, L. reticulatus*) bacillius (*B. thuringiensis*) fungi (lagenidium) nematodes (*R. iyengari*), are also being tested in the field, and better strains are being developed.

- (c) The pesticide resistance has been on the increase with regard to the main rural malaria vector *A. culicifacies*.
  - (d) No, Sir.

## **Enterance of Pesticides in Human Body**

1531. SHRI P. R. KUMARAMANGA-LAM: Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

- (a) whether Government are aware that many pesticides act upon and enter the human body through skin and if so, the names of such pesticides registered in India; and
- (b) whether any of these is being sold for the control of lice etc. in human hair/body if so, the names of such products, prices at which sold and the name of manufacturers?

THE MINISTER OF HEALTH AND FAMILY WELFARE (SHRI NILAMANI ROUTRAY): (a) and (b). Some pesticides in diluted percentage which do not cause toxicity to humans have been registered under the Drugs and Cosmetics Act. Some of these, which are used locally on the scalp as ointments or oil for the treatment of lice and scabies are given in the statement below. The prices of these formulations are not controlled under Drugs Price Central Order 1987.