

**GOVERNMENT OF INDIA  
DEFENCE  
LOK SABHA**

UNSTARRED QUESTION NO:5285  
ANSWERED ON:24.04.2015  
VEST FOR DESERT TROOPS  
Venkatesh Babu Shri T.G.

**Will the Minister of DEFENCE be pleased to state:**

- (a) whether the Defence Institute of Physiology and Allied Sciences (DIPAS) has developed air conditioner vest for desert troops;
- (b) if so, the details thereof; and
- (c) the steps taken by the Government to improve the operational readiness of our troops in extreme hot and cold conditions?

**Answer**

MINISTER OF DEFENCE (SHRI MANOHAR PARRIKAR)

(a) Yes, Madam.

(b) Defence Institute of Physiology and Allied Sciences (DIPAS), a laboratory of Defence Research and Development Organisation (DRDO), has developed a prototype of portable Man Mounted Air Conditioning System (MMACS) for desert operations. Presently, the User Model Mark-IV has been fabricated and performance evaluation has been done under lab conditions.

(c) To improve the operational readiness of our troops in extreme environmental conditions, DRDO has developed the following products / technologies which are used by Armed Forces:-

# Acclimatization Schedule at High Altitude.

# High Altitude Pulmonary Oedema (HAPO) Bag.

# Aloe Vera based cream 'ALOCAL' for treatment of Cold Injuries.

# Customised yoga package to combat high altitude stress.

# Electrically heated Gloves for the protection of aircrew placed at high altitude and cold.

# Cold weather clothing for the protection of aircrew placed at high altitude and cold.