

MINUTES OF THE MEETING UNDER CHAIRMANSHIP OF PSA TO GOI ON 'NUTRITION AND HEALTH' HELD ON JULY 19, 2017 AT VIGYAN BHAWAN ANNEXE, NEW DELHI

The following officials attended the meeting:

1. Dr. R. Chidambaram, Principal Scientific Adviser to the Govt. of India **Chairperson**
2. Prof. Ramesh Chand, Member, NITI Aayog
3. Dr. Trilochan Mohapatra, Secretary, DARE & DG, ICAR
4. Dr. Swati Basu, Scientific Secretary, Office of the Principal Scientific Adviser to GoI
5. Dr. Girish Sahni, Secretary, DSIR & DG, CSIR
6. Dr. Deepak Pental, Director, Centre for Genetic Manipulation of Crop Plants, University of Delhi
7. Mr. Rajesh Gera, Deputy Director General, National Informatics Centre (NIC), New Delhi
8. Dr. Joykrushna Jena, Dy. Director General (Fisheries Science & Animal Science), ICAR, New Delhi
9. Dr. A. K. Singh, Dy. Director General (Horticultural Science), ICAR, New Delhi
10. Dr. A. K. Tripathi, Director, ATARI (ICAR), Guwahati
11. Dr. G. S. Toteja, Scientist 'G' & Head, Division of Nutrition, ICMR, New Delhi
12. Dr. T. Longvah, Director-in-Charge, National Institute of Nutrition (ICMR), Hyderabad
13. Dr. Ashok Kumar, ADG (AH), ICAR, New Delhi
14. Dr. Randhir Singh, ADG (Agriculture Extension), ICAR, New Delhi
15. Dr. A K Singh, Head & Principal Scientist, IARI, PUSA, New Delhi
16. Shri Suresh Kumar, Scientist 'F', Office of the Principal Scientific Adviser to the Govt. of India
17. Shri Sunil Kumar, Scientist 'F', NIC, New Delhi
18. Dr. Bharat Bhushan, Scientist 'D', Vigyan Prasar (DST), Noida

Dr. R. Chidambaram, the PSA to the GoI welcomed all the members and briefed the members about outcomes of last meeting held on 7th July, 2017 in this context. The meeting decided to begin with projects formulated for target groups having trackability. This will ascertain quantification of the impact of nutritional intervention on a specific target group. The intervention could be a combination of the utilization of modern and traditional knowledge along with appropriate region-specific variations. Two such target groups identified are (i) Adolescent group: Navodaya Vidyalaya and (ii) 0-2 years target group, which may preferably be in the tribal belt having limited number of people for effective tracking.

He said that while food security was very important, nutrition security can make the bridge between food security and nutritional disorders. He mentioned about mentioning of malnutrition by the Hon'ble Prime Minister in a recent meeting. There was a need to examine different types of bio-fortified crops to be cultivated and also role of ayurveda in nutrition. He further said that affordable health care was needed. He also stressed the need for understanding the role of microbiome in individual nutrient absorption. He then asked Shri Suresh Kumar to make a brief presentation giving salient features of the last meeting held on 7th July 2017.

Shri Suresh Kumar summarized the views of **Dr. Soumya Swaminathan**, Secretary DHR & DG, ICMR, wherein she mentioned about issues of underweight, wasting, stunting as well as anaemia. He also summarized the views of **Prof. Ramesh Chand**, Member, NITI Aayog, **Dr. Anura Kurpad**, Professor, St. John's Research Institute, Bangalore and **Dr. Vinod Paul**, Head, Department of Paediatrics, AIIMS, New Delhi, wherein different aspects, such as protein/vitamin absorption dynamics, reinforcement of medical practices and protocols to address diarrhea and Severely Acute Malnutrition (SAM), target programs vulnerable groups, need for developing nutrient enriched crops, focused efforts on food quality and safety, were stressed.

This was followed by a presentation from **Dr. Mohapatra**, covering increased production levels of wheat, rice, fruits, vegetables and milk in the country and very recently in pulses as well. He also pointed out that since 1969, out of 4,360 new varieties of grains that were notified, only 1,177 were in the seed chain by the year 2015-16. Many of such new varieties developed by ICAR were bio-fortified, either in terms of vitamins and proteins. He emphasized recent release of two

landmark varieties of PUSA Basmati rice and new varieties of wheat which were resistant to rust. **Dr. Pental** pointed out the complexity in farmer adaptations, as even marginal decrease in the yield of new variety would influence farmer acceptance. Need for involving private companies in seed business and managing higher seed replacement levels were also stressed. **Prof. Ramesh Chand** wanted to focus bio-fortification of high yielding varieties. Other option was to achieve a premium of a new fortified variety by way of seed replacement of older varieties. He further shared concern of declining nutrient level of soils, which in turn was affecting the crop level nutrition. **Dr. Pental** stressed the need for bio-fortification of food in order to address malnutrition in a much shorter span. Developing and deploying bio-fortified crops could be a relatively longer term solution. **Dr. Longvah** said that there are varieties available naturally which are rich in micronutrients such as β carotene. He also indicated the role of Ministry of Food Processing Industries in bio-fortification of food.

Dr. Toteja stressed the need for food security at household level, which had many contributory influencing factors. Therefore, inter-sectoral approach involving health, agriculture, Public Distribution System etc., is important. He also briefed about the outcomes of the Expert Committee meeting held last month to deliberate on integration of agriculture and nutrition for demonstrating freedom from hunger constituted by ICMR under the Chairmanship of Prof. M.S. Swaminathan, Founder Chairman and Chief Mentor, MS Swaminathan Research Foundation, Chennai.

The meeting stressed the need for following aspects:

1. Inter-sectoral approach involving scientists, social scientists and experts in agriculture, health and nutrition and soil science, to comprehensively address the public health challenges, specifically the problem of under-nutrition
2. A roadmap with attainable goals to be prepared in consultation with all concerned
3. Emphasis on individual nutritional status - availability, affordability and awareness

The meeting endorsed the previous meeting decision of conducting two pilot studies on two trackable target groups with to begin with:

- i) **Adolescent group:** Comprising students of Navodaya Vidyalaya which is a residential school system spread across the country, catering to the disadvantaged section of the society
- ii) **0-2 years target group:** This may be preferably in the tribal belt having limited number of people for effective tracking

The meeting concluded by constituting a three-member committee, to draw an **Action Plan** on national nutrition. The Committee will be chaired by Secretary, DHR & DG, ICMR, with Secretary, DARE & DG, ICAR and Prof. Ramesh Chand, Member, NITI Aayog as members. Additional member could be coopted as deemed necessary. Inter alia, the Action Plan will nucleate synergy projects with multi-sectoral linkages, both with a short term perspective (year 2020) and longer term (year 2032). Such projects would include methodology for tracking improvements and cover the following areas:

- i) Integration of nutrient rich food/grains in public distribution system (PDS)
- ii) Replacing traditional seed with bio-fortified nutrient-rich quality seeds
- iii) Focus initially (to help trackability) on tribal groups and closed groups such as students of Navodyaya Schools

The meeting ended with a vote of thanks to the Chair.
