

PLENARY

Plenary Paper

GREEN REVOLUTION, PEST MANAGEMENT INNOVATIONS, AND FOOD SECURITY CHALLENGES – A PMCP PERSPECTIVE

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ABSTRACT

The introduction of semi dwarf rice and wheat varieties and ushering of Green Revolution in rice in mid sixties have greatly reduced challenges in food security in tropical Asia. The introduction of IR8 and other modern varieties of rice and some wheat varieties have demonstrated that concerted efforts and commitment in targeted research in agriculture and food production can eliminate or at least minimize food insecurity in tropical Asia.

Green Revolution in rice, however, generated a major pest and disease pressure on rice and other food crops due to increased fertilizer and other resources use. Negative impacts of erratic climate changes have caused a lot of challenges in food production worldwide. Innovations in Pest Management have made substantial progress and have improved possibilities of managing pests through innovative approaches using modern practices and policy interventions. Optimisms have grown due to improved agricultural output and productivity gains to offset major food demand by using modern science and technology. Global cooperation in IPM research thru donor support on a sustained basis have made some progress in developing IPM interventions in food crops besides cereals such as in vegetables and other horticultural crops.

There is, however, no time for complacency considering that Global Food Security is threatened by increasing population and that food production is not keeping up with this demand. Global warming and climatic aberrations further intensify the threat of high demand and low productivity. Pests and disease pressures are constantly changing with more severity due to changes in global climates. Scientific and other agricultural societies like PMCP need to provide some leadership on how these societies can play a critical role in enhancing Pest and Resource Management innovations and spread of modern pest management interventions in all food crops, including storage pests. At this historic juncture of Golden Anniversary of PMCP it will be prudent, if not a priority for the society, to take stock of what it has achieved in the last 50 years and celebrate its achievements. More critically what additional or different challenges it must meet and make new priorities for the future and develop agenda items for the PMCP for the coming decades to be relevant to the changing needs in the country.