



**AVRDC**

The World Vegetable Center



# **Development Action Planning (DAP)**

**34<sup>th</sup> International Vegetable Training Course**  
**“Vegetables: From Seed to Table and Beyond”**  
**Module 2 (October/ November, 2015)**

**SHEERAZ AHMAD**

**Agriculture Extensionist/Training Expert**

**AVRDC–Pakistan, The World Vegetable Center**

**Email: [sheeraz.ahmad@worldveg.org](mailto:sheeraz.ahmad@worldveg.org)**

**Skype: [sheeraz\\_ahmad](https://www.skype.com/user/sheeraz_ahmad)**

**Cell: +92 345 508 9798**





**AVRDC**

The World Vegetable Center



## **AVRDC-Pakistan-Vision**

- **Diversification of vegetable crops / varieties with reduced pesticide use and efficient management to increase income**
- **Expansion of mungbean in various existing cropping systems with improved production and IPM practices**
- **Increased quality seed supply of improved varieties with reduced price**
- **Improving production technologies for specific agro-ecosystem**
- **Additional income through the development and promotion of postharvest and value addition technologies.**





**AVRDC**

The World Vegetable Center



# Partnerships

- **Generation of Technology**  
AVRDC-NARS
- **Dissemination of Technology**  
NARES- Provincial Partners and Line Departments
- **Adaptation of Technologies**  
NARES and Service Providers
- **Seed Companies and Community Organizations/NGOs**

NARS=National Agriculture Research Services

NARES=National Agriculture Research and Extension Services





**AVRDC**

The World Vegetable Center



# Location of Activities





**AVRDC**

The World Vegetable Center



## **Three topics in module 2 that were most useful to my work.**

- 1. Value Chain** (From Seed to Table)
- 2. Protected Cultivation for Vegetable Crop Production** (Structures, types and green house management)
- 3. Food Safety and Nutrition**  
(Especially Bio active compounds in Fruits and Vegetable)







**AVRDC**

The World Vegetable Center



# Purpose of DAP

- **Protected Cultivation of Vegetables (PCV)**
  - Tomato
  - Bitter gourd
  - Chili
  - Sweet Pepper
  - Cucumber
  - Marrow
  - Musk melon
  - Water Melons
  - Gourds
- **Strengthening of the Vegetable Seed Production Value Chain (VVC)**
  - Onion
  - Chillies
  - Peas
  - Tomatoes
  - Okra





**AVRDC**

The World Vegetable Center



## ***Protected Cultivation Techniques in Pakistan***

- **Tissue Net Farming**
- **Plastic Tunnel Farming**
- **Green Net Farming**







## Pictorial Glimpses



Cucumber grown in a plastic tunnel



A happy farmer with a tomato basket produced under Protected cultivation



Introducing green net tunnels in Pakistan



Site view of plasti-culture (locally design bamboo tunnel)













**AVRDC**

The World Vegetable Center



# Action Plan Development

## Problems:

### PCV:

- Traditional approaches (Structures, material use and management)
- Maximum use of chemicals
- No proper marketing (grading, packing and packaging)
- Post-harvest losses
- No Sustainability and year round production (thinking big?)

### VVC:

- Missing links in VVC
- Quality seed production
- Seed certification
- Meeting the demand





**AVRDC**

The World Vegetable Center



## Objectives:

- To build capacity of \*farmers for green house/tunnel management for year round efficient and profitable production of vegetables
- To develop a complete value chain of Vegetable Seed production (especially onion, Chilies, Peas and Tomatoes)

\* (for AVRDC-Pakistan beneficiaries)







**AVRDC**

The World Vegetable Center



## Target Audience:

- Vegetable growers
- Vegetable Seed Producers and dealers
- Working partners of AVRDC-Pakistan

## Specific Activities

- Trainings
- Farmers field days
- Workshops
- Exhibitions
- Print and mass media (TV, Radio, booklets, newspapers, pamphlets', brushers and flyers etc)





**AVRDC**

The World Vegetable Center



## Human resources/Activities/Time:

- The Research Associates (9 RAs) of AVRDC will identify the need base trainings in the potential area where PCV is practiced.
- A quarterly event plan will be developed with the consents of working partners and farmers.
- AVRDC Pakistan Training budget will utilized for the activities.
- Trainings will be executed as per the developed training plan (on quarterly basis) till the end of project.







AVRDC

The World Vegetable Center



## Challenges:

- Slow adoption of Protected Cultivation among small vegetable growers
- Low awareness level of farmer (literacy rate, illiterate)
- Lack of storage of vegetables
- Low level of understanding about hybrids and Cultivated Varieties & high prices
- Indiscriminate use of pesticide in protected cultivation
- Import of vegetable seed / hybrid without considering adaptability
- Lacking awareness about benefits of drip irrigation technology PCV
- Practice of adulteration of seed in markets
- Poor linkage of Research institutes with farmers
- Bottlenecks in postharvest handling, value addition and value chains





# Thank You

