

ANNADARPAN SERIES

A Machine Vision Solution for Quality Analysis of Food Grains & Pulses

ANNADARPAN series of instruments are unique and novel systems that permit rapid, real time and non-invasive means of assessment of physical quality parameters of a number of food grains and pulses produced in India using image processing techniques. Based on the specific requirement of farmers and marketers in agricultural domain, THREE variants of ANNADARPAN system are available as per details given below:

- **ANNADARPAN^{STANDARD}**
This is a desktop system with manual feed and lower sample handling capability. Suitable for low volume use in R&D environment.
- **ANNADARPAN^{PLUS}**
This system is very robust with higher sample handling capability and suitable for small mandies.
- **ANNADARPAN^{DYNAMIC}**
This is a conveyORIZED system with continuous operation capability thereby being suitable for bigger mandies with heavy load of assaying.

Broad Features:

This is an Electronic Assaying System for bulk sample analysis including (a) E-Vision hardware (Camera, illumination) fixed on conveyor, (b) Appropriate feed arrangement, (d) Crop specific feeding mechanization for conveyor system and (e) Crop-specific Software.

- ConveyORIZED Feed and Inspection / Batch-mode Desktop based Operation.
- Electronic Vision and Digital Image Processing based Inspection.
- Configuration of ConveyORIZED / Desktop based instruments to remain constant for most of the commodities.
- Real time computer supported operation.
- Software to be different for different crops.
- Rapid and non-invasive measurement with Online data presentation
- Compatible for interfacing with existing E-Marketing System/s.
- User-friendly operation with Data archival and traceability.
- Integration with available gadgets, such as, moisture meter, weighing scale, etc. for complete assaying.
- Crops and Pulses include Caster Seed, Cumin, Coriander, Groundnut, Wheat, Paddy, Rice, Maize, Bajra, Mustard, Thymol (Ajmo seeds), Jowar, Tur, Gram, Udad, Mung, Kaboli Chana, Traditional Chana, Sesamum, Cotton Seed, Turmeric, Variali, Asario, Guwar, Soya bean, Green Chilly etc. may be assayed with the system. Based on need of users, more agri produces may be included.

Benefits:

- Meet requirement of crop specific quality standards of FCI, AGMARK etc.
- Useful and appropriate quality data made available to remote users on virtual marketing platform with nationwide outreach.
- Ensure right price of commodities to farmers and shield them from intermediaries.
- Ensure transparency of dealings at all levels of agri-marketing.



ANNADARPAN^{STANDARD}



ANNADARPAN^{PLUS}



ANNADARPAN^{DYNAMIC}

Target Beneficiaries:

- Farmers
- Agricultural traders
- Commercial agriculturists
- Govt. authorities and stakeholders of agri-marketing at all levels.



Centre for Development of Advanced Computing, Kolkata Centre

Plot-E2/1, Block-GP, Sector-V, Salt Lake Electronics Complex, Bidhan Nagar, Kolkata - 700 091

Telephone: 91 33 2357 9846/3581/3950/5989/4258 Fax: 91 33 2357 5141 Website: www.cdac.in