Database of Agricultural Mechanization in Sri Lanka

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Overview of Statistics System for Agricultural Mechanization

- Responsible agencies

General statistics
  - Department of Censes & Statistics

Agricultural Statistics
  - Department of Agriculture (SEPC)

Mechanization statistics
  - Farm Mech. Research Centre
Channels, ways and frequency to collect, report and disseminate the agricultural mechanization statistics

- Import data from the customs (entry points- only import data)
- Through grass root level extension officers (Machinery being used in the field)
- Island wide surveys
Overview

Quantity and quality of agricultural mechanization statistics

- Data provided by the field officers are of Dept of Census & Statistics are not reliable
- Unacceptable deviations can be observed with the data from the Dept. of Censes & Statistics and Department of Agriculture (SEPC)
- Import data does not show the actual number in operation
- Least attention is given for mechanization data
Gaps and Needs

- Challenges and Constraints for the Statistics Collection and Management
  - Withdrawal of field level officers from DOA
  - New field level officers are not DOA officers
  - Lack of interest
  - Data collection is not a mandate of field officers
  - Dept. of Censes & Statistics not identified as a priority area.
Minimum Data and Statistics Requirements

- List of local manufacturers
- Type and scale of local production
- Number of imported machinery in each category
- Number of machinery in operation
- Contribution of machinery in crop production
- Comparison of mechanized cultivation and traditional cultivation.
- Distribution of farm machinery service providers in the region
- Cost of each farm operations
- Farm power availability in regional level
- Mode of Accessibility to the available machinery
Solutions and Suggestions

- Establish a reliable data collection mechanism operating under one umbrella
- Convince the policy makers the importance of collecting and analyzing of farm machinery data (organize a workshop for Agri Ministers ??).
- Draw a workable plan
Needs of Establishing a Regional Database

- Could be a reference material for all stakeholders
- It would help Farm Mechanization planning in respective countries
- It would help to exchange proven technology among member countries as well as beyond the borders
Feasibility of Establishing a Regional Database

- Collect and evaluate available compiled databases in some countries
- Review the available databases compiled by regional organizations (like SAARC)
- Use homogeneous simple template to collect data
Contribution to the Proposed Database

- Provide already compiled data for reference
- Convince policy makers the importance of compilation of data
- Collect and prepare country data and submit for the regional database
- Update the collected data as required
Available Resources

“Facts & Figures of Farm Mechanization in Sri Lanka”

- Compiled by GTZ in 1985
- Updated in 1987
- Data collected conducting an island wide survey through field level extension officers
- Comprehensive publication including all relevant data on Mechanization in the country
Facts & Figures of Farm Mechanization in Sri Lanka

Contents

- Distribution of Farm Machinery in districts
- Cost of production of major commodities
- Machinery population
- Percentage of mechanization of activities
SAARC Database

Directory of Successful Farm Machinery in SAARC Countries
Outline of SAARC Database

- Name of the Machine/equipment
- Purpose / Use of the Machine
- Clear picture/assembly drawing of the Machine
- Mode of Operation
- Working Principle
- Working Capacity
- Cost of Operation
Outline of SAARC Database....

- Overall dimension
- Weight of the machine (Kg)
- Cost of Equipment (US $)
- Address of the Manufacturers
- Information Source
- Other feature, if any
Example of SAARC Database

- **Drum type paddy seeder**

  - **Purpose / Use of the Machine:** Row seeding of pre-germinated paddy
  - **Mode of Operation:** Manually drawn
  - **Working Principle:** One day soaked pre-germinated paddy metered and sawn in pre set row and hill spacing
  - **Working Capacity:** 3 – 4 acres per day
  - **Overall dimension**
  - **Weight of the machine (Kg):** 5
  - **Cost of Equipment (US $):** 200
  - **Address of Manufacturers**
  - Farm Mechanization Research Centre contract manufacturers
  - Information Source; farm Mechanization Research Cntre, Department of Agriculture, Maha Illuppallama, Sri Lanka,
  - Tel: +94 25 2249222, +94
  - E mail: [fmrc@slt.net.lk](mailto:fmrc@slt.net.lk)  Web: [www. doa.lk](http://www.doa.lk)
  - **Other features:** Seed paddy requirement is 10 – 12 kg per ac