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Preface

Indian agriculture, in 21st Century, is passing through the phase of stagnation. To increase production in agriculture in an environment of reduced land, reduced water availability and reduced manpower in agriculture is, indeed, a challenging task. Despite a robust growth in GDP, annual average growth rate of agriculture and allied sectors declined from 3.2 per cent to 2.3 per cent during 7th Five Year Plan to 10th Five Year Plan periods. Apart from growth in services and manufacturing sectors, this can be largely attributed to structural deficiencies that Indian agricultural sector is fraught with. Some of these are: poor/ill—maintained irrigation delivery system, poor road connectivity to rural areas, small land holdings, declining power availability in agricultural sector, unbalanced use of fertilizers, low seed replacement ratio, high quantum of wastages of food grains and other agricultural produces at pre and post harvest stages and declining access to credit/capital for large section of farming community. According to an estimate, food grains, vegetables and fruits worth Rs. 58,000/- crore are wasted in the country per year.

In 1986, Government of India constituted a committee of experts comprising of members from DES, NSSO, CSD, IASRI, Ministry of Civil Supplies and Ministry of Agriculture, etc., with the objective to assess the seed, feed and wastage ratios for food grains. This committee estimated that seed, feed and quantity of food grains wasted account for 12.5 per cent of the total production of food grain produced. The Committee further stressed the need for a fresh study for getting reliable and update estimates of the net quantity of food grains available for human consumption. Accordingly, Techno Economic Research Institute undertook a pilot study on seed, feed and wastage rates of food grains on behalf of Planning Commission in some of the districts of Punjab, Haryana and Western Uttar Pradesh in 1986-87. As per the results of the study, 10.32 per cent of the total production of food grains was used as seed, feed and waste in these areas. The corresponding figures for Western Uttar Pradesh, Punjab and Haryana were 12.01 per cent, 8.22 per cent and 10.84 per cent respectively. It was recommended that the study should be extended over other regions in India.

In the light of the above background and for planning purposes, to estimate how much of food grains are available for human consumption, it is important to know the proportion of seed, feed and wastage of total production of food crops.

In view of this, the study entitled, "Study for Estimation of Seed, Feed and Wastage Ratio for Major Food Grains in Bihar" was assigned to the Centre i.e., Agro-Economic Research Centre for Bihar & Jharkhand, T M Bhagalpur University, Bhagalpur by the Directorate of Economics & Statistics, Ministry of Agriculture, Government of India in the work plan 2004-05. Analytical findings of this study reveal total wastage of 10.99 per cent in case of cereal crop (paddy) and 5.01 per cent in case of pulse crop lentil accounting for an average of 8.00 per cent. This is, of course, an interesting revelation regarding wastage of food grains in seed and feed. However, it can be reduced further if post-harvest losses particularly during transportation, threshing and storage are checked by timely infrastructural and scientific measures.

Co-operation and required assistance provided by Smt. Anita Devi, Ward Commissioner, (Bara Telpa), Sri Indra Pratap Singh, Hari Narayan Pandey (Mukhiya, Dumri Panchayat), Binay Kumar singh (Mukhiya, Shitalpur Panchayat), Dr. Ramjee Singh (Mukhiya, Bela Panchayat), District Agriculture Officers of Saran and Patna, Block Agriculture Officers of all the selected blocks of the sampled districts, Director and other officials of the Directorate of Statistics & Evaluation, Government of Bihar, Patna, Agriculture Production Commissioner (APC) of Bihar and others are duly acknowledged and also highly appreciable and they all deserve our thanks. Special appreciation is also due to Dr. Amalendu Kumar and Dr. Rajiv Kumar Sinha Project Leaders and Co-Project Leader respectively, who meticulously worked through to complete the most important study in a reliable and systematic way.

I will be failing in my basic duty, if heartiest thanks are not extended to the Hon'ble Vice-Chancellor Dr. (Mrs.) Prema Jha, Pro-Vice-Chancellor, Dr. K K Mandal and the Registrar of T M Bhagalpur University, Sri R C Ray, Ex-Adviser, Prof. R S Deshpande, Prof. & Head, ADRT, Centre, ISEC, Bangalore and Dr. Rajendra B Sesai of the same Centre for their inspiring, congruous and academic and other co-operation and support as and when required.

Mr. Jai Shankar Choudhary, Typist deserves special thanks who took all pains to make the study report attractive.

31st July 2007

(B K Jha) Hon. Director