

## Farm Size, Irrigation and Intensity of Land use in Indian Agriculture

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### 1. THE ISSUE

Rising land productivity is the only solid and enduring basis for Indian agriculture to achieve a continuous increase in production. A rise in land productivity can take place in many ways. One such possibility lies in increasing multiple cropped area, either by introducing new crops or by expanding area under existing ones. The underlying assumption is that every unit of the incremental cropped area gives some additional output, albeit small, so that output per acre of net sown area rises although it may or may not give an increase in output per acre of gross cropped area. It is, therefore, in the fitness of things that the future thrust in Indian agriculture goes, *inter alia*, in the direction of increasing multiple cropping. The National Commission of Agriculture (1976) has well recognised the importance of this fact and has given statewide projections of cropping intensity for 2000 and 2025 (Government of India, 1976, pp.150-53). In this connection, it is relevant to pose the question how are the prospective gains of rising cropping intensity going to be shared by various farm size groups? In particular, what is the future of small farms in the matter of cropping intensity? For locating a meaningful answer to this question, we must look to the experience of the past and the interim changes that are taking place at present.

The farm management studies (f.m.s.) for the fifties and the sixties, conducted for a few states, provided evidence to an inverse relationship between farm size and cropping intensity (Sau 1978b, p.104 and Bharadwaj, 1974, pp 94-95). This pointed to the fact that large farmers were not utilizing land, a very scarce and non-reproducible national resource, as optimally as small farmers. A higher cropping intensity on small farms provided a powerful explanation for the well known inverse relationship between farm size and productivity per acre, as also larger employment potential on such farms (Bharadwaj, 1974). On this basis, a strong case for land redistribution was also made. If land is transferred, through a regulated tenancy arrangement or otherwise, from those who keep it idle for a good part of the year to those who keep on cultivating the same for a