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# Experiences with System of Rice Intensification (SRI) in Cambodia

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**Abstract**

Rice production in Cambodia, like in many other countries of the region, dominates the agricultural sector. Rice farming provides food, income and employment for about 65 % of the Cambodian population. However, yields of rice production are comparatively lower (1.7 t/ha) than for example in neighboring Thailand and Vietnam. Furthermore, about 80 to 85 % of the national rice production is largely the result of only one rain-fed crop per year. Increasing rice production in Cambodia has been an explicit goal of many development efforts from international and national projects during the last decade. The approaches to increase rice yields focus on the identification and dissemination of improved varieties, recommendation of correct fertilizer application, as well as on Integrated Pest Management (IPM).

Since 2000, an increasing number of Cambodian farmers started to practice the system of rice intensification (SRI), which was originally developed in Madagascar. SRI entails rather unconventional cultivation practices, especially in plant and water management, and therefore does not spread as easy as a new variety. The paper describes the essential elements of SRI, i.e. transplanting immediately after uprooting, careful transplanting, transplanting young seedlings, transplanting one by one, transplanting with wider spacing, improving soil aeration by avoiding continuously saturated soil during the vegetative growth and by early and frequent weeding. The paper further discusses the experiences of 400 Cambodian farmers in adapting SRI during the wet season 2001. Yields ranged from 2 to more than 10 t/ha, depending on how many elements of SRI were applied. The majority of farmers obtained yields from 3 to 6 tons per ha and the overall yields showed an increase from 50 to more than 200 % over the national average. So far these achievements result mainly from small plots sizes, but importantly also with traditional crop varieties and without chemical fertilizers. Similar encouraging experiences with SRI are reported from a number of other countries worldwide, especially in Madagascar and Sri Lanka. Also IRRI is increasingly aware of the potential of SRI for sustainable improvement of rice production for small farmers with limited resources.

**Keywords:** Rice production, sustainable farming

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