



## RESEARCH PAPER

# Resource recycling and their management under integrated farming system for North- East Karnataka

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**Abstract :** A field experiment was conducted at Main Agricultural Research Station (MARS), Raichur during 2012-14 to study resource recycling and management from different IFS models in NE Karnataka. Different combination of crops, animals, fishes and birds were examined in form of seven integrated farming systems (IFS) models. Among different IFS models crop + cow + goat + poultry birds + fish (F<sub>7</sub>) emerged as the best integrated farming system in terms of resource recycling, resource management and nutrient budgeting. The waste material/by products of crops and animals were recycled and used as inputs for other components of integrated farming system. The F<sub>7</sub> system (19,122 and 20,623 kg ha<sup>-1</sup> during 2012-13 and 2013-14, respectively) added highest amount of organic residues in both the years which is closely followed by F<sub>5</sub> system (18,368 and 19,614 kg ha<sup>-1</sup> during 2012-13 and 2013-14, respectively). Quantity of N, P and K added and nutrient budgeting varied between IFS models.

**Key Words :** Integrated farming system, IFS models, Nutrient recycling, Nutrient budgeting, Natural resource management

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