Conservation agriculture for small farmers: Challenges and possibilities. (A06-wall185542-Oral)

Authors:

- P.C.Wall* *CIMMYT*
- J.M.Ekboir *CIMMYT*

Abstract:

Conservation Agriculture (CA) relies on ground cover with crop residues, supported by adequate crop rotations. Zero tillage, which maximizes crop residue retention, has spread rapidly over the last 20 years, mostly on large mechanized farms. However, there are considerable areas of zero tillage on small farms, notably in Brazil, India, Pakistan and Ghana. CA offers important benefits to resource-poor farmers, especially reductions in hand labor, as well as increases in crop productivity, and reductions in risk. Extending the use of CA on small farms involves two major complications: development of appropriate technological packages and overcoming inadequate small farmer access to information. Successful packages require sources of animal feed, appropriate weed control strategies and zero tillage seeders, adequate crop rotations and nitrogen fertilization strategies. Conventional research and extension systems need to be transformed into innovation systems focused on farmer experimentation: successful diffusion of CA technologies for small farmers has only occurred where networks of multiple agents emerged and worked with participatory methodologies.

Corresponding Author Information:

Patrick Wall CIMMYT Apdo Postal 6-641 Mexico, DF 06600 Mexico phone: 52-55-58042004 fax: 52-55-58047558 e-mail: P.Wall@cgiar.org

Presentation Information:

Presentation Date: Thursday, November 14, 2002 Presentation Time: 8:00 am

Keywords:

Conservation agriculture, small farmers, developing countries, zero tillage