The First World Congress on Conservation Agriculture
DECLARATION

The First World Congress on Conservation Agriculture was held in Madrid from October 1-5, 2001 and brought together international organisations, farmers' associations, scientific institutions, private sector, non-governmental and other organisations from more than 70 countries, located in both the developing and industrialized world. The main objective of the Congress was to consider and promote the world-wide adoption of the principles of Conservation Agriculture and its locally adapted practices.

Accumulated positive experiences with Conservation Agriculture are leading to its rapid adoption world-wide, in diverse agro-ecological zones that range from the humid tropics to the steppes of Central Asia. Its acceptance and adoption enhance agricultural production and also reduce the costs, while at the same time conserving and enhancing the natural resources of land, water and climate. These benefits are the basis for ensuring stable incomes for commercial and small-scale farmers and for the continuing production of sufficient food, fibre and domestic energy for a growing world population, also demonstrating significant potential as a tool for poverty alleviation.

Conventional agriculture includes practices such as burning of crop residues or deep soil inversion to control weeds and prepare the seedbed. These practices are often unsustainable since they considerably increase land degradation by soil compaction and by erosion, which in turn results in the contamination of water bodies by sediments. Thus, land productivity, the environment and human health are threatened. In addition, conventional agriculture produces greater carbon dioxide (CO2) emissions into the atmosphere and decreases soil organic matter content, so contributing to global warming. The adverse impacts of such agricultural practices are manifested world-wide through an accelerated degradation of many natural ecosystems, decreased biodiversity, and increased risks of desertification in the more vulnerable areas.

The adoption of Conservation Agriculture principles can avoid these damaging effects. Conservation Agriculture aims to replicate natural processes through the maintenance of a permanent soil cover consisting of cover crops and/or crop residues through which crops are seeded or planted. Agroforestry may

also contribute towards this objective under specific circumstances. To ensure minimal soil disturbance, the establishment of crops and cover crops is done by direct seeding/planting - this technique being covered by the terms direct drilling, zero tillage, no-tillage, and no-till - or even by surface seeding or broadcasting. However, when appropriate, minimum/non-inversion tillage can be an alternative best management practice. Crop rotations, if judiciously selected, enhance the soil's rooting environment, its structure, nutrients and moisture retention, while avoiding the build-up of pests and diseases. Conservationist techniques aim to alter as little as possible the soil's natural composition, structure and biodiversity, while also enhancing water infiltration and moisture conservation, thus combating erosion and soil and water degradation.

Conservation Agriculture is more than just a range of farming practices: it embraces a holistic concept of agriculture, combining the basic elements of production with those of conservation. It is best implemented at watershed level in order to capture all potential benefits.
Conservation Agriculture makes sustainable and rural development practicable through its integration of crop bio-diversity, mixed crop/livestock farming, and other activities, all characterized by efficient use of resources. This results in a more productive agriculture, which improves food security and rural livelihoods. Women's welfare benefits especially because labour inputs for soil preparation and weeding are reduced, with positive effects in freeing time for attending to family and household responsibilities. The many economic, social and environmental benefits of Conservation Agriculture justify a fundamental re-appraisal of conventional farming methods. And Conservation Agriculture should be considered as a theme which cuts across various disciplines, organisations and ministries.

This Congress calls upon politicians, international institutions, environmentalists, farmers, private industry, and society as a whole, to recognise that the conservation of natural resources is the co-responsibility - past, present and future - of all sectors of society in the proportion that they consume products resulting from the exploitation of these resources. Furthermore, it calls upon society, through these stakeholders, to conceive and enact appropriate long-term strategies for Conservation Agriculture, and to support, further develop and embrace its concepts. They are the most appropriate means of ensuring the continuity of the land's ongoing capacities to yield food, other agricultural products, water, and environmental benefits in perpetuity. It follows that those

environmental benefits provided by farmers practising Conservation Agriculture should be recognised and recompensed by society.

ACTION PLAN

With respect to the conclusions of this Congress, and in order to exploit fully the potential benefits to be gained from the adoption of Conservation Agriculture, the Congress participants urge that the following strategies and measures be put into effect:

I. National governments and international organisations should encourage, at all levels, the mindset changes required, as well as fostering co-operation and exchanges to create synergies for Conservation Agriculture and to avoid duplication of efforts. Farmers' associations such as CAAPAS and networks such as RELACO for Latin America, ACT for Africa, SACAN for Asia and ECAN for Eurasia, should be encouraged and reinforced at national and international levels, since they are the most effective bottom-up means of developing and disseminating Conservation Agriculture technology. The progress of activities and the outputs of these networks and working groups could be presented at the Second World Congress in 2003.

II. Promotion of Conservation Agriculture should emphasize its increased land productivity, diversification prospects, and increased profits for small-scale and commercial farmers. These benefits, as well as the global benefits to land resources, health, and the environment, should be drawn to the attention of national and international communities

III. International organisations should collaborate in developing common definitions and guidelines for achieving the benefits to be obtained from the adoption of Conservation Agriculture and develop compensatory support mechanisms for the environmental benefits that CA provides.

IV. International organisations should encourage South-South and South-North co-operation, for important information resources, experience, capacities and equipment designs relating to Conservation Agriculture are now available in Latin America, and they are quickly developing in Africa and Asia.

V. The private and the public sectors, together with NGOs, should actively collaborate in the development with farmers of the technologies needed to achieve effectiveness in Conservation Agriculture. This includes collaboration in the areas of access to information and the local adaptation of farming practices, tools, equipment, seeds and agricultural chemicals. Particular attention should be given to the safe use of the latter by small farmers.

VI. The role of the public sector should be to promote Conservation Agriculture in an institutional policy framework, with inter-ministerial working agreements to provide appropriate support from public sources to promote its adoption by farmers. Support is needed:

- § To recognise the public benefits of Conservation Agriculture that result from initiatives taken by private farmers, including among others, conservation of natural resources - especially of water, soil, and biodiversity - protection of the environment, and reduction of flooding and damage to civil infrastructure;
- § To compensate farmers for these services and assist them to face the costs necessary for the transition to Conservation Agriculture, especially for the purchase of implements, which farmers initially may not be able to afford;
- § To fund key research and advisory services jointly with the private sector, but demand-led by farmers;
- § To support the acquisition of appropriate knowledge through the development of training and capacity-building for farmers, advisors, institutions, etc.;
- § To implement information campaigns, policies and activities that encourage Conservation Agriculture and to promote appropriate private investment in this area, as well as to discourage inappropriate practices,
- § To provide appropriate infrastructure to facilitate the transport, processing, distribution and, if necessary, the export of any surplus production;
- § To support adoption and continuity of Conservation Agriculture managed at local level through legislation, incentives and credit;
- § These measures should be linked with existing legislation and other appropriate instruments such as the United Nations Convention to Combat Desertification and the Kyoto Protocol.

VII. Before attempting widespread promotion of Conservation Agriculture within a particular area, small-scale initiatives should be launched within the community or watershed, and within an environment that is favourable for addressing local constraints. The activities should take into account local traditions, knowledge, and experiences, and they should provide information, education, practical training and capacity building in order to develop local practices best adapted to the concepts of CA. These activities should be directed towards farmers, farm workers, field leaders, technicians, and agronomists, and should involve both men and women.

VIII. The promotion of Conservation Agriculture must be associated with significant efforts to address the problem of competition with livestock, especially in semi-arid areas. Systems designed to reduce overgrazing, such as rotations with high quality pastures, should be included in project plans for Conservation Agriculture.

IX. The representatives of the various stakeholders attending the First World Congress should develop partnerships and undertake joint commitments to design, plan and implement actions. They should monitor procedures and be able to present their activities and some early results during the Second World Congress. (The Brazilian delegation proposed hosting this Congress in some two years' time).

X. In the short term, the following actions should be initiated:

- § To facilitate and strengthen international exchanges, FAO - and more specifically its Conservation Agriculture Working Group – should quickly assume the role of a focal point for such exchanges, in effect becoming the host for a discussion forum.
- § Presentations and papers on Conservation Agriculture should be prepared for international conferences and events, such as those falling under Agenda 21 and its various conventions, i.e CSD, UNCCD, UNCBD, UNFCCC. Similar action should be taken for the World Summit on Sustainable Development (Rio+10) to be held 2-11 September 2002 in Johannesburg, South Africa, and for any other global environmental meetings. Work on this should begin immediately.
- § A special synergy with the Kyoto Protocol should be explored so that carbon sequestration via Conservation Agriculture could become a substantial incentive for its adoption.