

Editorial

I am pleased to introduce the inaugural issue of **Renewable Agriculture and Food Systems**. The title and new cover reflect the transition to an agriculture that utilizes food production and distribution systems relying less on non-renewable petrochemical resources and more on renewable resources from the sun for food, fiber, and energy needs. Papers in the March issue illustrate this transition. Nazarko et al. demonstrate the potential for broad adoption of 'Pesticide Free Production' for mixed crop farming in Manitoba, Canada, particularly where farmers are offered a flexible framework for transition to reduced pesticide use. In northern Europe, increasing the use of forage legumes in livestock systems can produce higher profits than grass-based systems using high levels of nitrogen fertilizer. However, widespread adoption of forage legumes will depend on technological developments that reduce the risks associated with more difficult establishment and higher nitrate leaching of forage legumes as compared to grass swards. In the northern US Great Plains, weed control problems in no-till wheat-fallow systems led to development of a planning tool for diversifying and integrating crop choices with ecologically-based weed management. Interactions with organic producers of the Northern Plains Sustainable Agriculture Society were instrumental in development by USDA of this tool which can reduce herbicide inputs by 50% for Northern Great Plains producers. The synergistic value of varying viewpoints was realized when organic farmers reviewing this paper questioned the non-target effects of this weed management approach; the author consequently discovered that the enhanced crop diversity proposed would also provide collateral benefits for non-chemical disease and insect control.

Several articles in this issue demonstrated that, in addition to the environment, economic and social factors in urban and rural settings play a major role in enhancing the sustainability of agricultural systems. For wheat farming in Syria, production doubled in two decades due

to development of improved germplasm and management practices by ICARDA; future gains will likely depend on other adaptations such as legume/cereal rotations. In the North Central USA, net returns from a 4-year organic crop rotation, with and without organic premiums, were greater than or equal to those of a corn-soybean rotation using synthetic pesticides or chemically processed fertilizers. As reported by Kratochvil in Austria, organic farming not only increases the availability of healthy, high-quality food, but results in preservation of natural resources and overall food security. Advantages to agricultural and social sustainability, due to the empowerment of women, is demonstrated by the adoption of alley farming with leguminous trees in Nigeria that increased agricultural production and the quality of life of women farmer adopters. In his book *Ecocide*, Brosimmer suggests that the structure of society might be altered to reduce our impact on other species.

The changes in the journal are intended to advance the goal of creating a common ground where scientists, educators, policymakers, farmers, and other practitioners of various perspectives and viewpoints can share their research and ideas. This is highlighted by Kamyar Enshayan's Forum article on 'Local Food, Local Security' that advocates the benefits of locally produced food on safety and security. The divergence of opinion about what constitutes a 'safe' food supply is well illustrated by the thoughtful, yet differing, responses of Wally Wilhelm and Kate Clancy on this issue. The Editorial Board looks forward to the journal serving as a forum where conventional agriculturalists, striving toward more sustainable systems, can interact with others in organic, biological, and biointensive agriculture to develop an agriculture that will achieve the vision of "Sustaining Earth and Its People."

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Editor-in-Chief