

FSN FORUM DISCUSSION No. 50, 2010
**STRENGTHENING FOOD SECURITY BY EMPOWERING FARMERS TO
CONTRIBUTE TO SEED BIODIVERSITY**
FROM 12TH JANUARY TO 8TH FEBRUARY 2010

Dear Forum Members,

My name is Maria van Heemstra. Biologist and agronomist by training, I have worked in genetics research and in NGOs focussing on agricultural and indigenous issues. Currently I am working within the Health and Healing project of the World Council of Churches (WCC)

The issue I would like to raise concerns the in situ conservation of plant genetic resources in a globalized world in which agriculture is increasingly industrial and based on monocultures of a limited number of plant species. **The trend for agriculture to be increasingly mechanized in the hands of fewer and fewer farmers cultivating larger and larger expanses of land is leading to a simplification of our landscapes and a reduction of our plant varieties**, whether directly related to food crops, or indirectly affecting agriculture by affecting climate, pollinators etc. For example in the United States and in Canada, for distances of some 1,800 km one can fly over fields planted to only two or three crop species. This simplification, homogeneous genotypes across large expanses of land, constitutes a threat to food security. An illustration of one of the consequences of this is that ironically [bees have it better and produce more honey in the middle of Paris](#) than in the countryside as they have access to a greater variety of flowers and are not exposed to pesticides

One aspect related to the simplification in agriculture is the **increasing concentration of seed production in the hands of a few large corporations**. In traditional subsistence agriculture production and reproduction (i.e. seed production) is not separated: farmers save seed from their own crops, thus developing many different local varieties which they continuously adapt to the changing conditions and their changing needs. However, these farmers, who have conserved a great genetic heritage and are holders of valuable knowledge about crops and are de facto plant breeders, are very vulnerable.

As one of the goals of the program I work in advocates for justice and the right to food, I am interested in hearing ideas, examples and experiences of people working in this area on the following questions:

- **How can we encourage subsistence farmers and indigenous peoples to continue to conserve this agrobiodiversity for the benefit of all humanity, while at the same time improve their living conditions and provide them with proper recognition and compensation?**
- **How can we raise the profile of these farmers so that the rest of the world is aware of and appreciative of their work and knowledge?**
- **Do intellectual property regimes applied to plant varieties protect subsistence farmers or rather do they reduce their access to genetic materials and contribute to genetic erosion?**

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- **How can we ensure that the seeds being produced by large corporations are the ones needed by mankind and not only designed to make profits for the corporations?**
- **How can we bring biodiversity back into our landscapes and discourage the practice of widespread monocultures of single genotypes?**

Any responses or advice would help us in our advocacy work with the UN and other international agencies.

I thank all forum members in advance for their time and effort in contributing to this query for which I have a personal interest and passion.

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