

AGRICULTURAL BIODIVERSITY FOR CONSUMER NEEDS

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The perspective from which we look at and how we understand the relation between agricultural biodiversity vs. nutrition and health depends on where we are in terms of society development and/or economic status. For societies where food availability is still a problem, survival is a primary goal. In contrast, in wealthy countries, where safe food is usually not a problem, it is the extra benefits coming with food that are the targets - well-being including disease prevention or even cosmetic effect.

Humans, as an inherent part of the ecosystem, are diverse, starting from polymorphism through personal preferences to age, health status or daily activity. This generates varied dietary needs. Economically driven attitude toward food is that it has to be safe, cheap, all-year available and providing high load of energy, which generates high human pressure on the agricultural resources resulting in the loss of their biodiversity. Apart from that, there is a parallel demand for diverse food with pro-health value, but it can be only satisfied when biodiverse environment is available.

Soon, the food market will be more and more 'fork to farm' oriented. Personalized nutrition is already a subject of research. It could be obtained pharmacologically by using pure compounds, extracts or concentrates in individually designed formulas or via dietary approach, through proper diet composition. Obviously the latter way will require availability of a wide range of recognized diverse natural resources thus promoting agricultural biodiversity. This does not mean that 30 or more different apple varieties are expected to be available in the supermarket; it means that probably there will still be a few varieties, but selected not because of their technological parameters (i.e. resistance to pesticides, to post-harvest treatments, transportation, attractive look or long shelf life) but with primary consideration of their health value. In other words, food should be consumer, not producer oriented.

One cannot separate nutrition from health. Proper nutrition should provide all health benefits. When health is understood in the physiological dimension, it can be secured through the wise utilization of diverse natural resources and diet composition – assuming that agricultural biodiversity is available. In this respect, biodiversity protection is of crucial value.

In urbanized populations, mental and emotional problems resulting from the town life style are often an issue. In some cases a remedy for such health problems could be the interaction with biodiverse environment. This includes the need for enjoyable food (very often traditional) as well as the need for diverse landscapes related with tourism, all providing necessary time for relaxation. Again, also in socio-economic and cultural dimensions, biodiversity is linked with human health.

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