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## **Where are the Future Farmers to Grow Our Food?**

*Global Networks, Global Perspectives and Global Talent*  
*Discussions on the Development of Human Capital in Farming and Agribusiness<sup>1</sup>*

Hans Jöhr

*Corporate Head of Agriculture, Nestlé SA, Avenue Nestlé 55, CH-1800, Vevey, Switzerland*

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### **Abstract**

Recent surveys on rural demographics in the US, Japan and the European Union reveal an ever-aging farmer population. The average age of farmers in the US is now 58 years, and 67 years in Japan. More than one third of European farmers are older than 65 – technically retired, whereas less than 5% of farmers in analyzed countries are younger than 35-years-old! All OECD countries show similar trends. Consequently, this question begs to be asked: who will grow our food?

**Keywords:** aging farmer population, future food needs, sustainability, food security, attractive professional career for farmers

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Corresponding author: Email: H. Jöhr: [hjoehr@gmail.com](mailto:hjoehr@gmail.com)

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## Introduction

Demographic projections for 2030 bring to the forefront an urgency of how we will feed 8.2 billion people – an ever-growing urban population in the context of resource scarcity – primarily water, while we also have to implement sustainable production practices and methods in agriculture, immediately, to cope with expected food demand.

### *Who Assumes this Extraordinary Challenge?*

Recent surveys on rural demographics in the US, Japan and the European Union reveal an ever-aging farmer population. The average age of farmers in the US is now 58 years, and 67 years in Japan. More than one third of European farmers are older than 65 - technically retired, whereas less than 5% of farmers in analyzed countries are younger than 35-years-old! All OECD<sup>2</sup> countries show similar trends. Consequently, this question begs to be asked: who will grow our food?

Keeping young, talented people in rural communities once they have the choice and possibility to leave, seems to be a lost bet. This is a phenomenon that has continued for decades if not centuries. The current trend is similar in emerging countries – Brazil and India report a shortage of farm labor, even with a tangible increase in salaries. Likewise, many developing countries suffer the same singularity: a massive brain drain in rural areas. Yet, most of us still have food available every single day at a very cheap cost.

Agricultural production systems and methods have been refined over the decades through a blend of technologies, mechanization, genetics, knowledge and continuous training of farmers. However, obtaining the necessary skills, competencies and know-how to run commercial farming operations have changed tremendously in complexity and content as well as at a speed never experienced. To keep pace with such new and ever-changing logistical demands requires talented and intelligent minds. But do we now stand at a crossroad where the needs and requirements do not match the human resources available today? Or does agriculture need to become more attractive in order to allure and retain those with capable minds?

Farming is about business, not romance, and it must become an attractive life-choice profession for farmers, smallholders and larger commercial producers alike. The economic and social attractiveness of farming are implicitly the main pillars of such choices. Sustainable intensification of farming systems without polluting, wasting and destroying natural resources, may offer one answer to farming's future by providing an appealing income and social recognition. Nonetheless, new production systems on sustainable agriculture are much more knowledge intensive. Farmers need to learn how to handle additional technologies, management methods, risk avoidance plans, financial literacy and environment protection practices, to list just a few.

Achieving the objectives of increased food production and food accessibility, and at the same time taking care of natural resources, requires appropriate knowledge, local know-how, expertise and long-term experience.

Farmers in OECD and some emerging countries generally have access to formal practical and theoretical training; apprenticeship or higher agricultural education is provided by public institutions or private organizations and enterprises. But in most emerging and developing countries, hundreds of millions of smallholder farmers do not have training or education at all, or even dispose of basic necessary know how to run their farm. They work on their land by default, not by choice. Although a large percentage of affluent urban consumers rely on their production, e.g. coffee and cocoa and, consequently, on minimum skills to handle food safety and quality assurance aspects at farm level, they remain totally unaware of the realities in which smallholders operate.

Empowering smallholder farmers in order to increase productivity requires providing access to training, markets and financing in order to raise incomes to build prosperous farming communities. The smallholder

<sup>2</sup> Organization for Economic Cooperation and Development is dedicated to promoting policies that improve the economic and social well-being of people around the world. [www.oecd.org/](http://www.oecd.org/)

farmer's contribution to food security and social development is key. Alliances to help smallholders must be built on complementarity between different production systems and sizes, rather than polarizing on large and small farmers only. This can be accomplished by providing the right incentives, ensuring a transfer of skills, and all-inclusive out-grower schemes. This is an indispensable and vital part of capacity building to grow our future food and beverage requirements in developing markets.

Many scholars argue in favor of increased research and development funding only for food security, as agriculture comprises less than 5% of the total spending on science, worldwide. One exception is China, where funding has more than doubled over the past decade. Nevertheless, just generating more technology and knowledge, without creating the capacity for understanding and applying and practically implementing knowledge and technologies at farm level is not a smart solution to guarantee additional food production.

The missing link and undeniable challenge of the future food system is a better connection from our academic and R&D ivory towers to the base. Farmers, both small and large need massive revitalization and land-based apprenticeships combined with on-the-job training opportunities and study programs provided by approved trainers. Basic education is the best investment and long-term solution to farming and poverty alleviation. We cannot donate farmers out of poverty, nor can we certify them out of misery without literacy.

A massive effort is required to build the awareness needed to *put basic training for farmers into the center of all rural development activities*. This is critical to strengthening the worldwide food system. This endeavor must be both a public and private task, whereas all public institutions are asked to revisit their focus on rural development, including development agencies, NGOs, aid organizations, and others.

The argument that better schools and practical training in rural areas will be lost anyway to urban migration is not a valid one. Prosperity in society has to be built in both, rural and urban communities. For decades, agriculture has supplied a workforce of talented individuals in all countries to build their national economies. Collective resources must to be reinvested to provide rural schooling and training opportunities wherever necessary. Out-migrating of well-skilled individuals from urban to rural communities is definitely, with few exceptions, not the trend.

Let us go back to the discussion on the economic and social attractiveness of farming.

- Would higher wages entice young future farmers to stay in the business?
- What consequences are imbedded in such an equation for consumers?
- Who should take the lead in innovative production system development; reshaping agricultural and rural development policy and elaborating the framework conditions to change higher labor productivity to justify investments and financial return in farming?
- Should educational institutions, NGOs and governmental aid organizations play a role in promoting farming as a choice for a prosperous professional life?

Regardless of achieving overall increases in agricultural efficiency and output, *reversing the trend of rural exodus* is a must in order to secure the food production needed to feed 8.2 billion people by 2030. If we fail this challenge, many countries may end up facing a situation similar to Japan. Japan expects another 40% of their farmers to quit agriculture in the next 10 years. Due to an aging Japanese society and a substantial drop in the number of full-time farmers, the Japanese government is now fostering a program targeting individuals, under age 45, to become farmers. How successful this undertaking may become is questionable, as small family-owned farms must still be operated and worked by their owners. Urgent policy reform in this sense must become a priority to make succession more feasible and local food production again viable.

Making a farming career attractive to young people is one of the most significant challenges that we are facing today. Succession in farming may not seem everywhere as dramatic as in Japan. However, across the world the same valid question remains: *Where are the future farmers to grow our food?*