

The Founder of a Family Business Dedicated to Vegetable Seeds for the Tropics Wins the 2019 World Food Prize

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Today, the World Food Prize Foundation announced Simon N. Groot from the Netherlands as the recipient of the 2019 World Food Prize, for his dedication to bringing good quality vegetable seeds to smallholder farmers in tropical countries and making a significant contribution to both economic and dietary improvement.

Inspired by Dr. Norman Borlaug and M.S. Swaminathan unleashing the Green Revolution for cereal crops in Latin America and Asia, Simon Groot single-handedly started the Green Vegetable Revolution. Starting in Asia, he laid the basis for a healthier diet for millions. He managed to break the poverty trap - the vicious circle from low access to quality seed, into low yield, and ultimately into malnutrition, poor health and poverty - and he turned it into economic prosperity for farmers and better nutrition for the rural and urban poor.

Whereas the original Green Revolution focused on improving staple crops such as wheat and rice, Simon Groot took the approach a step further by turning to vegetables. Vegetables are an essential and affordable source of micronutrients to prevent 'hidden hunger', which causes high mortality and severe health problems like stunting in children, reduced brain development and consequently fewer chances for economic and social progress in the future. Vegetables grow fast and can be grown throughout the year, therefore more crops can be raised in a year for earning a more steady income and for nutritious food. Born in a family of seedsmen, Simon Groot sympathized with the plight of poverty-stricken smallholder farmers and understood that to alleviate their suffering, diversification and high value crops were essential.

In 1982 Simon Groot founded East-West Seed in the Philippines, the first market-oriented vegetable breeding company in Southeast Asia. Four years later, Simon introduced 'Jade Star', the first locally developed commercial bitter melon hybrid in tropical Asia. This popular and highly nutritious (anti-diabetic) vegetable used to be difficult to manage. The new variety was easy to grow, produced high yields, and was resistant to downy mildew and other local stresses. It resulted in a dramatic rise in income for growers and increased

availability of bitter melon at rural and urban markets. This was followed by the introduction of thousands of improved, vitamin-rich varieties of local vegetables like pumpkin, cucumber, tomato, eggplant, hot pepper, okra, tropical brassicas and green leafy vegetables.

Soon Simon Groot reached out to more countries. East-West Seed now distributes improved seeds to over 60 tropical countries worldwide, currently offering varieties of 60 vegetable crops to smallholder farmers. These varieties are developed locally for higher yield, drought and heat tolerance, and longer shelf-life. Above all they are bred for resistance to multiple pests and diseases, thus reducing pesticide use. Over time East-West Seed has established 14 breeding stations in 6 countries where plant breeders and horticulture scientists work on improving pest and disease resistance, yield and vigor of the most important tropical vegetable crops. Its current portfolio also includes several traditional species like kangkong, mung bean, amaranth, wing bean, rosella, and others. The improvements are not limited to better genetics but include a wide range of seed enhancement technologies to produce robust seeds that can germinate and grow in the ever-harsher climate of the tropics. Work on enhancing nutritional quality is on the way.

Simon Groot realized that to maximize the added value of high quality seeds, farmers also needed training on improved vegetable cultivation. Unlike any other seed company, he invested heavily in capacity building in Good Agricultural Practices. Over the years hundreds of thousands of farmers were trained in close cooperation with local and international organizations.

In order to make these varieties accessible to smallholder farmers, most seeds are delivered in very small packages. In 2018 East-West Seed sold 24 million value packs containing a small quantity of seed for a price of \$1 in local currency. All together 500 billion seeds to plant 28 million hectares were sold that year. Thanks to these seeds and knowledge transfer, farmers have doubled or tripled their yields and harvest a much higher quality produce, often doubling their net income. Wider accessibility and availability of quality seeds has resulted in lower prices of vegetables in local markets, allowing urban women in particular to feed their families better. Slowly, Simon Groot managed to transform the vegetable seed market in Southeast Asia. In the 1990s other vegetable seed companies followed his trail in Asia, confirming his vision. Today the same happens in sub-Saharan Africa.

It is appropriate to mention here that Simon Groot greatly believes in the importance of science and the collaboration with scientific institutions, in particular Wageningen University & Research and its predecessors, such as the Institute for Horticultural Plant Breeding. Joint work is carried out not just in breeding and crop management but also in capacity building. He has always kept a close link with us, and in 2015 he was awarded the Mansholt Business Award by the University Fund Wageningen. He also initiated a consortium of vegetable breeders to support AVRDC - the World Vegetable Center - with funds and expertise. In this way he has taken Dr Borlaug's ambitions one step further by advocating the combination of

private and public research supported by government policy – an approach which is often hailed as the Dutch triple helix and explains the leading role of the Netherlands in agriculture and food.

Notwithstanding his wide international experience with political leaders in the entire world, Simon Groot has remained a modest man. The expression that characterizes him most is: “Seeing big smiles on faces of farmers has given me tremendous satisfaction.” Those are words that Dr. Borlaug himself could have pronounced. Both men share an extraordinary vision and dedication. Over 40 years Simon Groot has established a company that today serves 20 million smallholder vegetable farmers in Asia, Africa and Central America - a company of 5,000 talented, passionate seed professionals on a mission to improve the lives of farmers and contribute to a healthier life for the poor. His children are actively involved in running the company, thus continuing an impressive family tradition. I am convinced that Dr. Borlaug would have been impressed by the stamina and vision of Simon Groot, and would have shared his conviction that food security must entail not only calories but also nutritional qualities through vegetables.

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https://www.worldfoodprize.org/index.cfm/88533/18762/the_founder_of_a_family_business_dedicated_to_vegetable_seeds_for_the_tropics_wins_the_2019_world_food_prize