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Investing in early childhood nutrition to combat entrenched poverty in rural Australia

Kelly McJannett

Food Ladder

Food Ladder is the world's first not-for-profit organisation to use hydroponics and environmentally sustainable technologies to create food and economic security for communities otherwise reliant on aid and affected by poverty. Founded in 2008, we use custom designed systems to grow commercial quantities of nutrient-rich produce around the world; from rural towns in India and Uganda to the most remote parts of the Northern Territory in Australia. Providing food security, education, training, employment and more.

Every day around the world, we have children of all ages visiting our Food Ladder systems. Some are malnourished and have never seen, or even heard of, some of the fruit and vegetables we grow. Some have dinner on their plate but it's unhealthy and processed, because in many remote communities it's all families can afford. And others struggle when it comes to learning, and can engage in science and mathematics by using their hands and fostering life, instead of staring at a whiteboard.

Over the last few months in preparation for this conference I took the time to speak to many of the schools who engage with our Food Ladder program. To ask teachers from all over the world how the lives of their students have benefitted from accessing fresh and healthy produce on a daily basis.

One teacher in India told me how prior to having a Food Ladder system on site many of her students struggled to learn, because their diet had led to poor health, and in turn, poor attendance and retention rates. However, as a result of implementing a Food Ladder system, the children were now eating fresh produce and learning how to grow and prepare healthy meals.

On the other side of town, another teacher in India told me how many of his students—who previously had no knowledge on how to grow and harvest plants—now grow their own vegetables at home. These children are now teaching their families invaluable skills in nutrition, to be passed down through generations.

This was echoed by a teacher in the Northern Territory, who shared how it wasn't only the students who were learning about the importance of making good food choices, but their families as well. With the school offering after school and holiday programs to local mothers, providing education and training in nutrition and horticulture, and fresh fruit and vegetables to take home.

Another Northern Territory teacher explained how beneficial visiting the Food Ladder system had been for disengaged students, with the program increasing their concentration and willingness to learn. The program was able to teach them skills they might otherwise have missed out on—like literacy and numeracy—which were incorporated seamlessly into practical skills, for example how to measure up plots and work out appropriate yields.

Regardless of where they call home, be it the slums of India's capital or remote Indigenous communities in Australia's north, all these children share three fundamental hurdles. Ill health, little education and few future employment prospects. At Food Ladder we believe these issues all stem from the one thing: poor nutrition.

It's often said a child's future is decided in their first 1000 days of existence—from the mother's pregnancy to the child's second birthday. During this time appropriate nutrition is pivotal, with international research finding children with a healthy diet are up to ten times more likely to overcome life-threatening childhood diseases, go on to earn 21% more in wages¹, complete 4.6 more grades of school and are more likely as adults to have healthier families². It is therefore paramount that parents, particularly mothers, and children are fed healthy food and taught about nutrition from an early age. Not only does it mean they can form habits for life, but they can also pass these habits down to their children and their children's children. Malnutrition is an intergenerational problem that must be fixed.

It is undeniable that poor nutrition also stunts a nation's economic growth, due to higher healthcare costs, earlier mortality and a lack of concentration, therefore advancement, at school. This not only happens in developing nations, but in Australia, most evidently in remote Indigenous communities, where 30.8% of Aboriginal and Torres Strait Islander people are unable to buy food due to lack of funds and produce availability³. Radical change is required across the entire food supply chain; to shift communities away from freighted, expensive and at times rotten produce, to locally grown, affordable and fresh alternatives.

However, addressing food insecurity, both here and abroad is no new notion. In rural Australia, governments and many well-meaning organisations have long tried to tackle the disparity between the health and wellbeing of remote Indigenous communities and their city counterparts. In fact the disparity is so much, that the United Nations frequently holds Australia to account on the world stage, with a recent report finding the basic needs of Indigenous Australians 'such as adequate housing, safe drinking water and sanitation, and access to education are not being met,' and that the health of Indigenous communities not only compares disfavouredly to other first world nations, but actually fares worse—in some respects—when compared to third world countries⁴.

Only last month this year's Closing the Gap report was released, once again showing minimal progress had been made towards reducing Indigenous disadvantage. The report revealed most targets were still off track, with only two of seven targets showing positive progress: Year 12 attainment and early childhood education. Other goals around life expectancy, child mortality, employment and education showed very limited improvements.

So how to address these issues where government bodies and many well-meaning organisations continue to fail? For us, at Food Ladder, we believe it's about working in partnership with like-minded Indigenous community-controlled organisations. The people on the ground who know what their community want and need.

Research has continuously shown that engaging and empowering communities to develop and sustain their own food solutions is the key success factor in addressing food insecurity and malnutrition. The traditional 'service delivery' model has long failed many Aboriginal and Torres Strait Islander communities, with many mainstream services lacking cultural competency, skills and knowledge. Programs must be tailored to each community, and this can only be done if organisations work in partnership with the very people who make up each community.

With this in mind Food Ladder addresses the key design failures of the many other food security and nutrition initiatives, by using a community-led, holistic approach addressing both the supply of, and demand for, nutritious food. The Food Ladder system is a capability-building, micro-economic development model, placing outcomes-creation into community hands. This is why we flourish.

So how does it work exactly? Firstly, we only work with the communities who want us, and we undertake community consultations with local leaders, teachers, employers and health providers to ensure everyone agrees on the project's vision, mission and method of implementation. Community buy in is key. Once funding is received and the build is complete, system operation, training of staff and educating of children and adults are the ongoing priorities.

As a not-for-profit organisation, we do not seek to own any assets, but rather each social enterprise is owned, governed and run by the local community—with full support and guidance from the Food Ladder team. As a result we build solid robust partnerships with local motivated partner organisations who own the life-supporting infrastructure, and support them with training and mentoring until they are able to operate the business independently. This takes between two to five years.

Our Food Ladder system in Ramingining, an Indigenous community in East Arnhem Land is a prime example. Cut off from neighbouring communities for much of the year due to monsoons, Ramingining has limited access to fresh and nutrient dense produce. Similarly, due to the arid climate the community can grow little produce themselves, so all food is shipped in at great expense, with produce traveling for up to three weeks across 3,000 kilometres, limiting it to a two-day shelf life once it has arrived. It was for this reason that we joined forces with ALPA, a local, Indigenous-owned retailer, which runs the only store in town.

Through the implementation of a Food Ladder system, one of the world's longest freight routes, became the shortest. With the produce harvested and sold in the same day, and at a significantly lower cost. As a result nutritionists recorded a 5% increase in the sale and consumption of fruit and vegetables in the first six months of the Food Ladder system being in operation, an increase never before seen in the community. The Food Ladder system has now been transitioned to the community, who own, run and govern the project independently. ALPA are now planning to move the system so it is attached to the store, so locals can 'pick and pay,' exemplifying the community's ingenuity and passion for the social enterprise.

Food Ladder systems flourish in remote communities that cannot rely on traditional agriculture. Our cutting edge, hydroponic food growing systems are five times more productive than traditional farming methods, and use significantly less water and energy than ground growth agriculture.

Better yet our systems not only provide food, but create employment and education opportunities, by engaging individuals in the growing of produce and teaching both children and adults about

nutrition and horticulture through a STEM-aligned curriculum and TAFE courses; all while fostering a space for cultural gathering, leadership and health services.

As the saying goes 'Give a man a fish, and you feed him for a day. Teach a man to fish, and you feed him for a lifetime.' Here at Food Ladder we will never just give away fruit and vegetables. To make long-lasting, intergenerational change we need to teach children and their families how to grow nutritious produce, so they can continue eating well throughout their lives.

For this reason we were thrilled to hear the Australian Labor Party announce earlier this month that should they win the next federal election they will restore funding for the Stephanie Alexander Kitchen Garden Program, a school-based program that teaches children how to grow fruit, vegetables and herbs and use them to make healthy meals. One in four Australian children are overweight or obese, while in remote and regional communities there is a silent epidemic of malnutrition. Without intervention, many of these unhealthy children, will become unhealthy adults.

Since its inception, Food Ladder has benefited 31,500 individuals, from horticulture classes to cooking and nutrition workshops, fed 6,000 people on a daily basis and created 600 jobs. Importantly, our sustainable business model creates micro-economies in remote communities, generating long-term solutions and creating real lasting change.

By implementing a Food Ladder system communities can restructure their food supply chain, shifting from towns that are geographically vulnerable and food insecure, to self-sufficient neighbourhoods with food sovereignty; a process which can be replicated all across rural Australia. When a community establishes a Food Ladder system, they combat entrenched poverty by investing in nutrition and teaching children and adults about the importance of healthy eating for a successful and prosperous life.

Good nutrition is the catalyst for positive change. Healthy diets reduce morbidity and mortality, boost attendance and retention rates at schools and in turn lead to improved job prospects and employment. There are also many economic benefits, including lower medical care costs, higher productivity, improved quality of life, and increased life expectancy. We know, without doubt, that malnutrition is at the core of all impoverished communities, and here at Food Ladder we believe we have the solution for solving this crisis.

References

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Presenter

Kelly McJannett is experienced in the development of high-impact start ups that create broad-reaching, sustainable impact and change. As the CEO of Food Ladder, Kelly has driven the organisation's growth throughout Indigenous communities in Australia and its international replication across some of the most challenging communities on earth. With a background in communications and public relations, Kelly holds a Bachelor Degree from UTS and is currently completing her MBA at Sydney University Business School, where she holds a full scholarship for her leading work in social enterprise development. Kelly is passionate about creating sustainable solutions for pervasive social issues affecting communities around the world, and galvanising the power and passion of organisations, individuals and governments to do this. In November 2016, the *Australian Financial Review* named Kelly among Australia's 100 Most Influential Women.