

Implementing Sustainable Rice Growing Practices in long Value Chains

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Introduction.

To drive the large scale adoption of sustainable rice growing practices, structured knowledge transfer and sponsorship of change aids and accelerates change, and greatly ensures durability of the new best practices adopted. Whilst research is very clear on what those best practices are, and science and evidence confirms their value and outcomes, even in the most advanced farming systems adoption can be slow and inconsistent. The challenge in long supply chains and diverse agriculture is that knowledge transfer and sponsorship of change is “long distance” and often “diluted” which demands full chain collaboration, farmer focus and partnering with world class technical institutions to ensure effective behaviour change and delivery of real benefits for farmers, brands, retailers, consumers in fact the crop industry as a whole.

Structure of Project

SAIRISI is a rice farmer centric project completing its first year in Northern Italy, tackling the barriers between research-proven sustainable best practices and their adoption, in long value chains where stakeholder demands are remote from their implementation point in rice agriculture.

This project is led by the Sustainable Agriculture Initiative Platform, known as SAI Platform, which is the primary food & drink global value chain initiative for sustainable agriculture, with over 100 value chain members across the world, covering most crops, livestock and geographies.

The leadership of SAI Platform brings together an otherwise unachievable collaboration along the whole value chain from Global and European retailers, branded manufacturers, millers, merchants, technical research, academia, and NGOs.

Materials and Methods

In 2015, five major end users (Global Brands Unilever, Kellogg, Retailer MIGROS, and Italian exporters Ebro Foods and Euricom) through their SAI Platform membership, identified precompetitive challenges and aims, to ensure that the Italian rice growing industry was prepared for the future, and able to deal with environmental, economic, and social opportunities and threats, in order to thrive, and secure its long term future. These “partners” decided initially to fund the project, and other partners are considering joining them.

These buyers of rice invited their suppliers progressively up the chain, gaining participation in the first year, 2016, of 62 representative farmers in Northern Italy, representing some 2500 hectares, producing over 15000 tonnes of rice, targeting to build capacity in sustainable agriculture and improve the sustainability of their specific farming practices. Farmers do not have to pay to participate but have to give approximately 30 hours of time before and during the annual crop season.

An external materiality mapping exercise, showed that climate change (its impacts and consequences), water availability, challenged biodiversity, and an ageing farmer population and the need to secure the next generation were all long term threats. Connecting these to the different stakeholder needs and opportunities from surveys, and assessments including SAI Platform’s Farm Sustainability Assessment (FSA), alignment of stakeholder interests and a common business case and drivers for change were identified through the chain. Then, world-class technical experts including Ente Nazionale Risi (ENR), the Italian Government National Rice Research department, experts from regional government, Universities, Water Communities, and LIPU –the national Birdlife charity, delivered targeted best practice training, demonstration and field visits to this farmer centric community.

A particular feature of the project was to bring national experts to the large group of farmers. This exposed them to latest best practice, emerging research, and through an atmosphere of privilege, created acceptance and interest

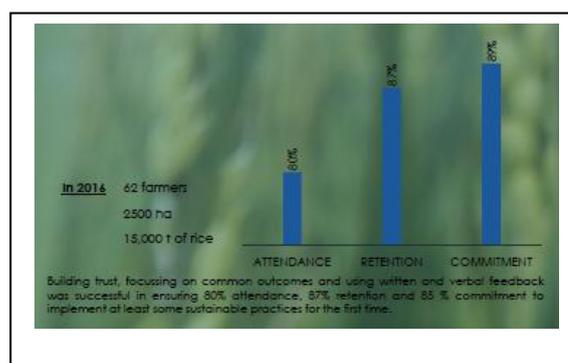
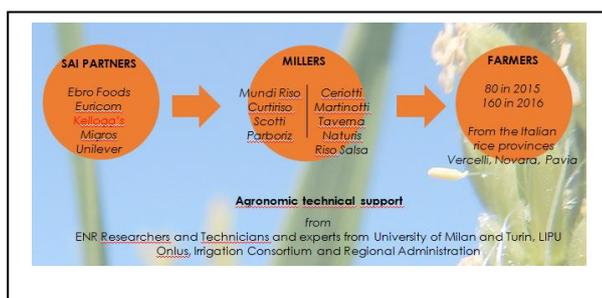
beyond the value of the content alone. This practice enabled individual farmers, who are not normally able to access or engage with such experts, to gain direct and first hand exposure to them and their influence and support to change to more sustainable practices.

Results and Discussion.

Building trust, focussing on common outcomes and value, and using written and verbal feedback for continuous tracking was successful in ensuring 80% attendance rate of the 62 farmers through the duration of the 2016 season. Delivering training which enabled farmers to improve economics, reduce environmental impact, and better manage profitability and risk were most attractive, with tillage, soil fertility, nutrients, precision-agriculture being the most popular and appreciated. In addition water management and greenhouse gas mitigation were introduced, into an environment not normally constrained, or therefore sensitized to reductions, though these may be long term pressures the project can help farmers prepare for.

Furthermore, and high 87% retention rate, (that is only 13% drop out rate) was exceptionally high confirming the ongoing value proposition of the project as it now proceeds into its second year.

Surveys showed an 85% of framers committing to implement at least some sustainable practices for the first time directly linked to the training they had received, confirming that knowledge transfer was destined to change practices and behaviours for the good of both farmers, other stakeholders and the environment.



Furthermore, the satisfaction of all stakeholders will now result in the scaling up of this project threefold in the region, and running a second level of master-classes for those having completed the first year.

Conclusions

The precompetitive collaboration of the value-chain, creates a vehicle and critical mass complementary resources to deliver meaningful knowledge transfer and behaviour change in the field, not achievable by individual members on their own.

Identifying win-win-win value propositions, across economic, environmental and social sustainability, gives benefits to farmers, the wider environment and economy, and the downstream customers, giving sufficient return on investment of time to drive the project forward.

The process of building trust, identifying needs, in this case through the structured SAI FSA, informing farmers and enabling them to both change and benefit in the process has become a self fuelling model now to be extended and replicated. In the future the project will seek to further inform, transfer knowledge, and positively influence beneficial behaviour change for farmers and other stakeholders, seeing long term sustainability of the whole industry as its goal.