



## AUSTRALIAN AGRICULTURAL CENTRE

The Australian Agricultural Centre's UN Food Systems Summit Independent Dialogue established the need to discuss with the UN, the Australian Government and the World Business Council for Sustainable Development as to the form, role and location of a "University" sited but independent organisation to internationally lead the development of the Framework for Nutrition and Food. This is to include activities from the seed sown, it's management and transfer from farm to kitchen and its production to ensure safe and nutritious food through communication and operational systems.

The AAC sees urgency in the establishment of such an entity to immediately

1. conduct educational classes to ensure the Framework and its construction is properly developed to include XRX-AG and XCHANGE
2. establish the framework with input from multiple sources and extend to a universal, international operational system.
3. implement at least 3 pilot schemes building on existing entities to demonstrate the approach in a school setting, community garden and commercial operation.

### **The AAC Game Changing Framework for Food, with XRX-AG and XCHANGE**

The **Australian Agricultural Centre** supports The UN Food Systems Summit and especially the goal "it will awaken the world to the fact that we all must work together to transform the way the world produces, consumes and thinks about food." It especially addressed, "Action 1 Ensure Access to Safe and Nutritious food for All"

The **Australian Agricultural Centre through the Dialogue** established a **Game Changing Framework** to unite all peoples and transform the way the world produces, consumes and thinks about food. It uniquely integrated the three dimensions of food, each with specialised but disparate players

1. the micro nutrients in the food to the macro, gardens and farms.
2. the seed to the savoury foods that are eaten. From farm to fork
3. the research laboratories to the steps in the food chain to ensure innovation and nutritious food

**This Wagga Wagga Framework for Food Systems creates a new, novel and global way to ensure "Action 1 Ensure Access to Safe and Nutritious food for All" it will**

### **Globally Educate, Enable and Execute Actions to Produce Nutritious Food for All**

The focus was on only One Action, inclusive of the origins of FAO, The Sustainable Development Goals and the Food Systems Summit 2021, "**Action 1 Ensure Access to Safe and Nutritious food for All**" as outlined here

**2**  
**Goal 2**  
End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

8 Targets	21 Events
9 Publications	766 Actions

[More info](#)



**3**  
**Goal 3**  
Ensure healthy lives and promote well-being for all at all ages.

13 Targets	16 Events
28 Publications	702 Actions

[More info](#)



**United Nations**



**Food Systems Summit 2021**

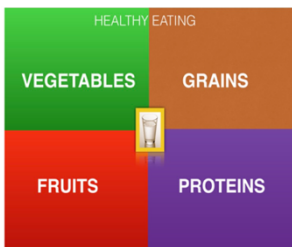
**Action Track 1**

**Ensure access to safe and nutritious food for all**  
**Dr Lawrence Haddad - Actions Solution Clusters.**



**What the World Needs Now**

**“Game Changing WW Framework for Food”**



**Establish “Wagga Wagga Framework for Food”**

**Unite “frames” with “work” with “procedures” to**

**Develop the AAC “Food Operating System”,  
from Self to Seed to Self.**

**FOOD & NUTRITION**

“the processes of production and procurement of the food necessary for health and growth”,

processes – action  
production  
procurement

Simultaneously

**XR-AG**

communicate and educate

**XCHANGE**

enables and executes as required.

**This resulted in the AAC Action which the Dialogue believed they could achieve as outlined here**

### **1 XRX-AG**

**XRX-AG** is about facilitation, a TFM, a “Technology Facilitation Mechanism” recognised as by the UN as being essential to support the implementation of the SDGs and to fuse food production with human health to achieve “Good Health and Well-being”. The project, **Xceptional Reality Xperience XRX-AG**, uses **eXtended Reality**, edge computing, digital twins and spatial computing, to unite disparate groups, to communicate bidirectionally and universally to maximise the creation and application of knowledge in real time. It is 21<sup>st</sup> century communication; knowledge available universally, instantly to both engage and enable, anyone, anywhere. A fusion of technologies, content and social constructs. Digital twins can also be built with the potential for global management input.

Agriculture generates high volumes of data that is required to be communicated to achieve these goals. Fortunately, in parallel, satellite and communications systems and devices provide the high-volume pipe for universal connectivity in real time. This multidirectional communication between all parts of the food system, including food production and nutrition scientists, farmers, transporters, economists, bankers, processors, marketers and consumers, will ensure knowledge is always in any hands, in the right form at all times. Digital Farm Twin, Digital Agriculture Twin plus edge computing.

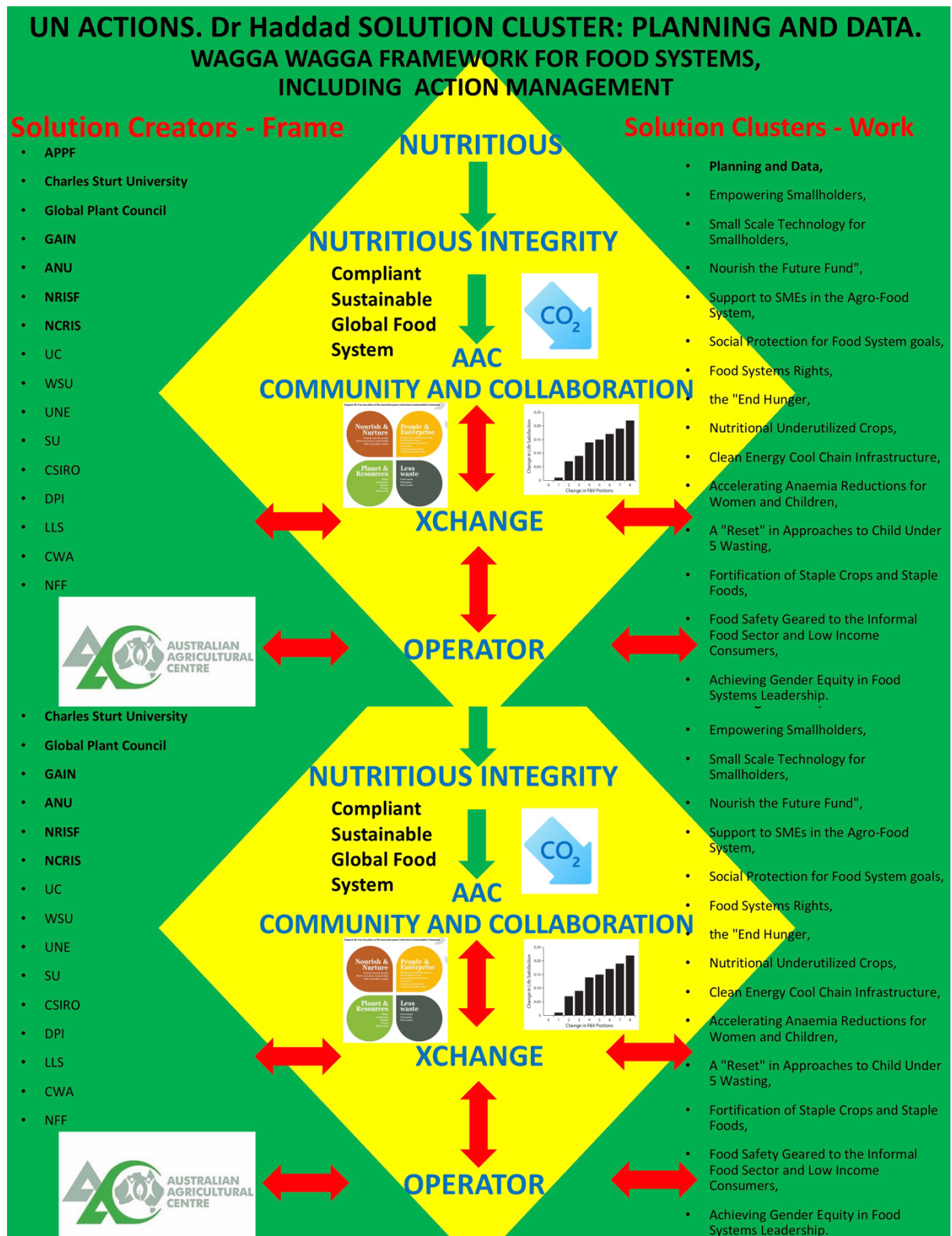
Today you will see a snapshot of a rapidly growing and expanding **Fusion** that matches an expanding nutritional food demand to the supply of food products designed to ensure “Good Health and Well-Being”. The algorithm for good health is transferred back down the food chain to production and in the process meets multiple SGD goals, from 1-17, especially to ensure resilient and sustainable societies, food systems and healthy citizens.

### **2. XCHANGE**

“We need new institutions and frameworks like a global agricultural trading system that has sustainable supply chains as part of its mandate. We need much more investment in the food system, and we need access to jobs and at least minimal social protection for those affected by hunger. Moreover, in the field of food and agriculture, there is, to date, no institution like there is in climate policy, where there is a UN committee, the Intergovernmental Panel on Climate Change, the IPCC, which provides a clear structure for the interaction of science and policy.” Prof von Braun

This led to the dialogue identifying the need to establish a Framework to include an **EXCHANGE** and the Dialogue did this. It was able to show how the framework would be established, how it would integrate multiple players and be able to exchange information and transactions to cover the private sector and public sectors, NGOs and philanthropic organisations. It covers researchers, farmers, gardens, chefs, and all the service sectors supporting the nutritious food chain, with safety and minimal waste.

The AAC Dialogue incorporated these into its discussions and can report significant acceleration of all of them, summarised in the Three Steps.



**Step 1. Nutrition. Basic Solution.**

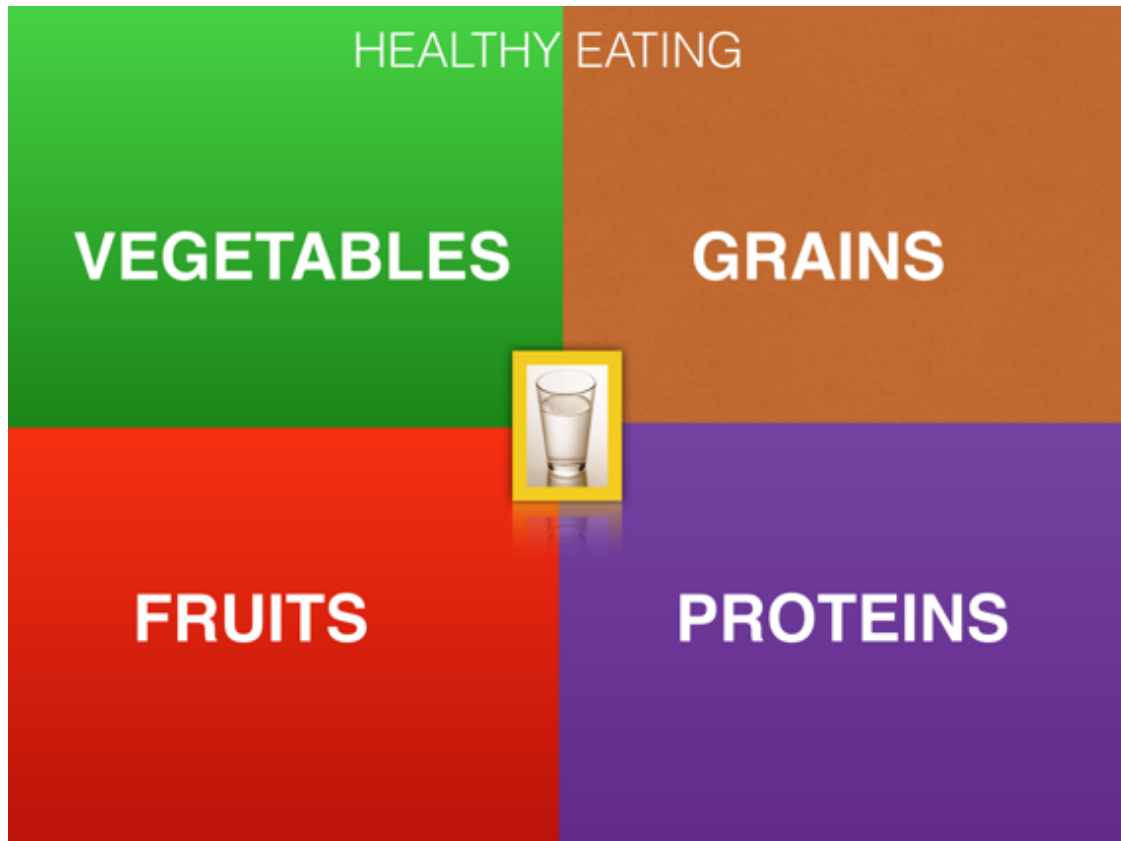
The adequate human nutrition mathematical equation is half/50% fruit and vegetables, quarter/25% carbohydrates and a quarter/25% protein along with water and nutrients.

A community garden in every school or village could facilitate convergence and achieve fusion into an output, food, with adequate nutrition for all. Facilitation in that the parties have to meet, convergence that requires families share and to work within the laws of nature with the fruits of global science. **Fusion integrates** tangibles and intangibles into the balanced output food, producing nutritious food, equitably and sustainably with recycling, ensuring healthy people. Economically it can be free land, free labour and free renewable energy. Govern locally, grow locally, eat locally, even with **informal social contracts**.

This is illustrated by the concepts that were brought together



This included the need to establish the nutritious nature of the food required by “self”, the individual, the “seeds” required to be planted to achieve the right food balance, the nature of the plants and the products in the garden and along the chain and ensuing the food was safe and no waste. It would include cooking.



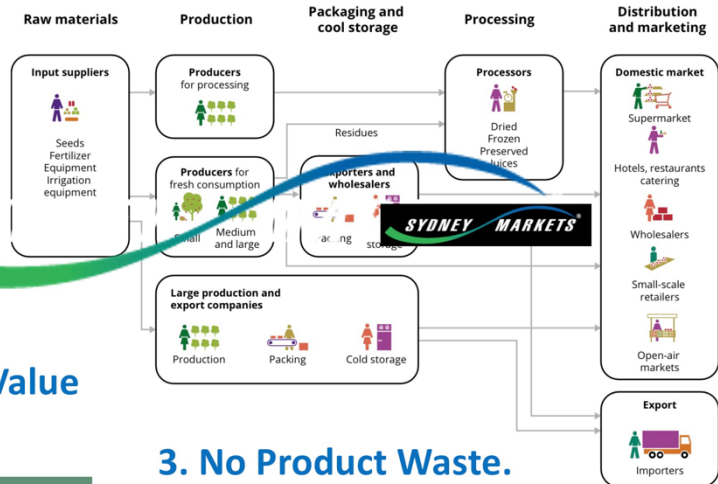
**Step 2. Nutrition plus Income.** It is difficult to maintain the nutritious integrity of food along the food chain. The basic solution can be disrupted by both time, if drought stops production, and distance if production and consumption are separated. It is greatly disrupted by a city rural decoupling which requires a farm, horizontal or vertical, not a garden to produce in **volume** to feed the chain from farm to fork, without food processors polluting the nutritious food. Nutritious food from farms provides the energy, protein, nutrients and water to maximise good health; **preventative medicine** to save costs from food processor induced ill health. The integrity of the chain has to be preserved. The chain provides income for farmers and other critical rural activities. Specialisation of production into individual products such as coffee, cocoa, or nuts can also allow integration by responsible entities like Olam or Mars to ensure quality and continuity from family farm to global markets along the chain. This can avoid child labour and ensure proper equitable incomes, sustainable science based production, quality products and harmony with nature. Communities, Co-ops or Companies

# From Field to Fork

## 1. Nutritious Production



## 2. Maintain Nutritious Value

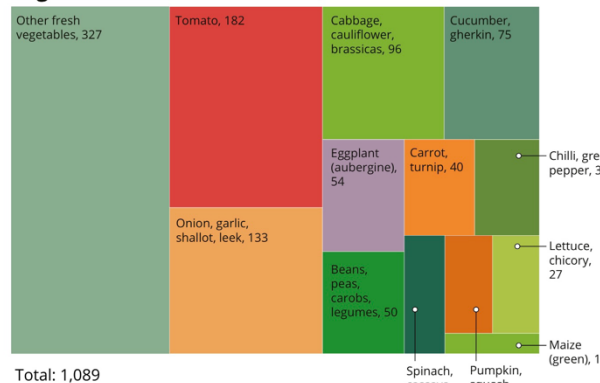


## 3. No Product Waste.

### Currently Globally

1.3 billion tons/yr of food  
 1/3 of global production  
 Could feed 3 billion people  
 \$US 680 billion.

Vegetables, million tonnes



33%

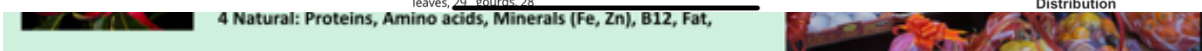
Agricultural Production

54%

Post-Harvest & Storage

46%

Processing, Consumption, Distribution



can provide finance, training, skills, knowledge, expertise and resources that might be limiting, with collective responsible economic governance and **binding social contracts**.

**Step 3. Global Fusion.** The AAC is especially engaged in the interface with the community. Planetary boundaries fence the global farm, within which fusion from brain wave to global consequences is orchestrated by numerous human constructs to ensure human behaviours meet those required from family to global governance, **including the commons**. The UN provides the direction through the community derived 17 Sustainable Social Goals. As a contributor we will contribute in identifying and designing the actions. **XR-AG** and **XCHANGE** is our contribution today to the Food Systems Summit as part of the **Decade of Action** to achieve the Sustainable Development Goals (SDGs) by 2030. The Summit “will awaken the world to the fact that we all must work together to transform the way the world produces, consumes and thinks about food.”

The use of new and propriety techniques allow us to embody the principles, Act with urgency, Commit to the Summit, Be respectful, Recognise complexity, Embrace multi-stakeholder inclusivity, Complement the work of others, in the framework structures.

Including SDG PRINCIPLES. This can then be applied as appropriate to detailed aspects of the scheme which would build in SDG principles, not as “nice to have embellishments” but accountable deliverables.

