



Noosa & Region Agri-Hub



Program Consultation Paper

Noosa Biosphere Reserve Foundation

VERSION: MARCH 2022

Agri-Hub Background

The Noosa and surrounding region have an opportunity to create a vibrant, productive and regenerative agriculture economy.

In August 2019, Country Noosa, supported by Noosa Biosphere Reserve Foundation, Noosa Shire Council, Noosa & District Landcare, and University of the Sunshine Coast, completed an extensive study entitled the *Noosa Hinterland Rural Enterprise Plan 2019 (REP)*.

The final REP report has been effectively endorsed in the Noosa Council's *Climate Change Response Plan* – Theme 6, p37; and Noosa Council's *Economic Development Strategy 2021-2030* – 5.6.2 Empowering Business Systems – Headline Actions, point #6.

The Noosa Biosphere Reserve Foundation (NBRF) seeks to activate key recommendations from the REP report.

The Noosa & Region Agri-Hub is an initiative that aims to connect community, support agricultural enterprise, and build food resilience in the Noosa Biosphere Reserve and surrounding region.

It is the intent of the NBRF to initiate this follow-up project and potentially engage a Project Manager to deal with various aspects of administration, records, database development and communications.

Initially this project will take place in a virtual environment with face-to-face interactions as required. As a prospective model becomes clearer, the project will become the responsibility of another entity (yet to be determined and the NBRF will remain in a supportive role).

Please join us in this conversation for improvement of our local agricultural productivity.

Get involved

We invite you to get involved and contribute to the project, or register to stay in the loop.

For more information and to register your interest, visit the project page on our website or follow our Facebook page ([fb.com/noosabiospherereserve](https://www.facebook.com/noosabiospherereserve)).

www.noosabiosphere.org.au/portfolio/agri-hub

Noosa Region Agri-Hub project team

Rowan Rafferty

Chair, Noosa Biosphere Reserve Foundation

Cr Tom Wegener

Director, Noosa Biosphere Reserve Foundation

Councillor, Noosa Council

Linda Venables

Director, Noosa Biosphere Reserve Foundation

In association with Professor Claudia Baldwin

University of the Sunshine Coast

REP Recommendations for Activation

1. Link Landholders & Farmers
 - including young entrepreneurs and women through a process of resource registration
 - investigate potential ‘linking’ legal frameworks in the Noosa Shire and surrounding regions.
 - conduct a resource audit for data collection and repository development based on Noosa Shire Council property database.
2. Means to provide education & training, qualify participants, mentoring/technical advice & resources to farmers and land holders.
3. Provide a centralised accessible, integrated information hub covering references to
 - resources and consultants
 - water and energy usage,
 - contemporary and emerging techniques
 - sustainable forms of regenerative farming
 - a Business Register (Network) for Farm Gate, Agri/Eco Tourism.
4. Develop marketing, production and distribution coordination, advice and direction to:
 - Retailers, consumers, wholesalers & manufacturers.
 - Develop branding options
5. Set up mechanisms for systems-based community collaboration and information sharing forums
6. Assist First Nations engagement to incorporate growing bush food and fostering cultural authenticity (particularly with Agri & Eco Tourism)
7. Potential for and fostering development of community/commercial kitchens
8. Explore Wildlife opportunities - Habitat preservation, enhancement and corridors.
9. Confirm Emissions Reduction Fund (ERF) opportunities.

How this will be achieved

1. Engagement with participants in the original Rural Enterprise Plan research
2. Seeking new participants and leaders through conducting community forums. The first of which were held during March 2022 across Noosa Shire.
3. Bring together major participants and stakeholders in a Symposium, May 2022.
4. The Noosa & Region Agri-Hub Program is a multi-project, multi-year endeavour.

Community support and employment

1. Fresh is best
 - Educate the community to value (and ultimately pay a premium for more nutritious, higher quality, fresher, in-season local produce . Most fruit and vegetables decline in nutritional value through the logistic chain required to place them on the supermarket shelves, so fresher is best and that means local!
 - Hint: Fruit and vegetables. Most fresh fruits and vegetables should be kept in the refrigerator in separate compartments. Fruits emit a chemical called ethylene that causes vegetables to spoil more quickly.
2. Supporting and diversifying the local economy
 - More local farmers, distributors, advisors, labourers mean a broader based and more resilient labour market with complimentary seasonal advantages.
3. Local distribution & reduction in food miles
 - Work will become available for local compliant food distribution and delivery to markets, retailers and, as has been popular during Covid, to your door.
 - The Agri hub will foster appropriate local distribution businesses.
4. Regenerative farming practices
 - These practices will lead to less silt and chemical runoff into our Noosa River system.
 - Produce better food.
5. Supporting First Nations People
 - Farmers of indigenous foods not only make a nutritional contribution but also add to cultural contribution to our communities.
6. Ethical employment practices
 - Provide recommended employment sources for labour etc.

Contribution to the circular economy

1. A major thrust will be the incorporation of actions to utilise compostable and bio char-ready waste into soil improvement from farms, retailers and general community waste.

This achieves the aims of:

- Agricultural soil Improvement
 - Substitution of chemical fertiliser costs
 - Vastly reducing NSC waste going to landfill and the associated costs. (\$9mil landfill expansion recently)
 - Toxic emissions reduction
 - Carbon sequestration and capture.
2. Increased local resilience and food security in part through reduced supply chain logistics.
 3. Fresher, locally grown, more diverse foods.
 4. Employment opportunities.

Case studies

Compostable Waste Management

- a. Production of compost to AS 4454—2003 (which covers presence of seeds, disease, toxicity, chemicals – carbon and nitrogen, in particular) is the aim of this standard.
- b. Taking organic household, retail and production waste e.g. vegetable, meat, bone, hair, general food waste to enable it to be used with assurance that it is free of harmful elements can be done on a relatively small scale with the use of aerobic bacteria and on a significant industrial scale using heat and gas digestion.

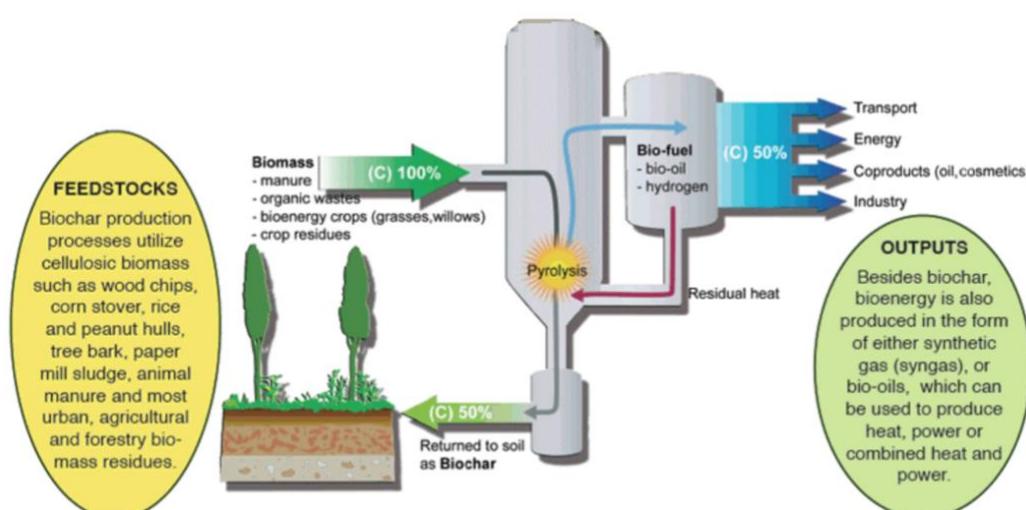
Due to the presence of heat during these production processes, this compost will only become fully utilised after it is integrated into soils and takes on the fungi, worms etc so important for fully productive compost. [Halve Waste – Closing the loop](#)

- c. A major issue in this process is cross contamination; a subject worthy of extensive education, regulation, compliance checking and enforcement.
- d. Currently these processes are employed by Earthborn Australia in Palmwoods (services utilised by private contractors in Noosa, not Noosa Council) and Phoenix Power Recyclers in Yatala. They are also used by a wide variety of LGAs in NSW (Lismore) and Victoria (City of Wodonga, Federation Council). [Northern Rivers Waste](#)
- e. A market would need to be established to confirm viability of establishing or contracting for these services.



Bio Char

- a. Biochar is organic material that is heated above 450 degrees but is not turned to ash. This is the process of "pyrolysis." [What is biochar](#)
- b. Most often it is plant-based material which had millions of cells housing living organisms, but after turned to char the cells are empty.
- c. When set in a compost or a biologically rich environment, the cells become the homes of new organisms and the char structure holds water much longer than the soil around it.
- d. In this way, the lifeless char becomes biochar.
- e. The char is almost pure carbon and when put back into the soil it is becomes sequestered carbon. [Biochar International](#)
- f. Biochar became popular when it was discovered in the Amazon basin. Ancient cultures had transformed the clay based, poor soils of the rainforest into high producing farming soils primarily through the intentional use of Biochar. [Biochar then and now](#)
- g. The use of biochar in Noosa can greatly enhance our soils for food production and decrease our greenhouse emissions. Noosa soils are largely poor, clay-based and like the Amazon rainforest soils. They have also been degraded by monocropping throughout the last century. Like the ancients, we can enhance our soil growing capacity with biochar and create regenerative, sustainable farming practices.
- h. Currently, lots of organic waste is buried in Noosa's landfill which decreases the lifespan of the facility and creates methane as it degrades, sharply adding to Noosa's greenhouse emissions. Through biochar production, Noosa can improve its farming practices, decrease land fill, and low its greenhouse emissions.
- i. The [City of Logan](#) is beginning to employ the pyrolysis method for making biochar from waste from its sewage treatment plant. It has been successful so far and the project is expanding.



Biochar production diagram courtesy of Johannes Lehmann

Contributors

Landholders

Landowners with property capable of being farmed, which they are happy to have someone else do.

Farmers

Who have the skills and willingness to make the land productive but are in need of land on which to work.

Logistics and distribution

Picking up relatively small quantities for delivery to a distribution point or point of sale is critical to the financial success of this enterprise. This will require individuals/businesses who are prepared to schedule and coordinate to optimise these requirements at relatively low margins. The key to success is scale, adaptability, careful planning and cooperation. Logistics and compliance around food chain supplies is crucial to delivering top grade produce as and when needed.

Consultants

From agronomists to agricultural economists, soil scientists to labour & machinery expertise, these consultants are all part of the proposed information data base.

Marketing and sales

Knowledge of the local/regional market, location, what will sell, when and how is vital knowledge for the grower. Risk management assessment will form part of this process.

Agri economics and business

A broader understanding of business principles and specifically agribusiness needs to be available to aspiring farmers.

Farm services

An easily accessible repository of resources for machinery, supplies, trades and labour will assist those embarking on agriculture to find reliable people and equipment easily.

Traditional owners and bush food

Our first nations people are a rich source of information about traditional foods that can be brought into commercial significance as rich sources of nutritious foods.

Food processing and commercial kitchens

The aggregation of produce from seasonal crops may be productively turned into marketable goods, eg. jams, pickles, dehydrated, markets and retailers alike. While production may provide intermittent, non-permanent work, coordination of annual calendars can make for harmonious work schedules.

Stakeholders

Agricultural service providers/consultants
Burnett Mary Regional Group
Chef Matt Golinski, View Restaurant, Peppers Noosa Resort & Villas
Cooran Food Collective
Country Noosa – Rural Enterprise Plan
End users, Restaurants Retailers, Markets
Food and Agribusiness Network (FAN)
Healthy Land & Water
Hinterland landholders
Kabi Kabi – First Nations people
Mary River Catchment Coordinating Committee
Noosa & District Landcare
Noosa Council – Sustainability Forum (NRM), Climate Change Response Plan
Noosa Integrated Catchment Association
Permaculture Noosa
Plastic Free Noosa
Qld State/Federal Govt
Related Food distribution charities
Slow Food Noosa
Sunshine Coast Foodie – Martin Duncan
Tertiary Education, TAFE, Schools
Tewantin-Noosa Country Women's Association
Tourism Noosa
Village Commercial Interests (Chambers of Commerce)
Waste Management & Composters
Young Farmers Connect: The Australian peak body advocating local farming
Zero Emissions Noosa