

Central Australian Food Futures Roadshow 19–21 November, 2019



Northern Territory Farmers Association held a Food Futures Roadshow event in Central Australia, 19 – 21 of November 2019. The event kicked off in Alice Springs with over 65 people in attendance. The welcome function was an enjoyable evening held at Azri Research Station and our hosts, Department of Primary Industries & Resources put on an amazing meal and venue. The topics for the welcome event were hemp and dates. Keynote speaker John Hall from Agrifibre addressed guests on the hemp industry, its opportunities and value to central Australia and future farming operations. John can see terrific opportunity for the hemp industry and the opportunity is very real. There was significant interest in hemp from the range of producers in the room...

Charles Darwin University/NT Farmers Association

Sustainable Farming study tour and ideas exchange to the Punjab, hosted by Punjab Agricultural University and Central University at Bathinda.

By Greg Owens

The Charles Darwin University /NT Farmers 10 day, sustainable farming study tour and knowledge exchange of the Punjab region in India was a fascinating experience. Six Top End organic and sustainable farmers, Kamaljit Sangha from CDU, Greg Owens from NT Farmers and Jacob Betros of TNRM visited some of the increasing number of sustainable/organic/ zero input farmers in the region. The Punjab, (5 Rivers), is situated 5 hrs to the North West of New Delhi toward the Pakistani Border and is the Grain Bowl for the 1.4 billion people in India. The area has extremely fertile soils with a basic continuous cropping rotation of rice in summer and wheat or potatoes in winter.



Manpreet Singh and Sidhwan Khurad, Sikh farmers, discussing a mint crop as an alternative to the basic rice/ wheat rotation with farmers from the Top End.

Since the Green Revolution of the 1960's when India became self-sufficient in food production these farmers have been reliant on high mineral fertiliser and pesticide inputs. The flat fields are furrow irrigated with ground water in most of the Punjab. These practices have been very successful in feeding the huge population of India but are starting to raise concerns on the long term sustainability for the farms and the health of the region. There is a strong movement to adopt more sustainable practices and to look more closely at the traditional farming practices that were in place historically.



Furrow irrigated potatoes on the fertile soils of the Punjab

The area faces some major environmental challenges that have developed from these practices which sustainable farming has the capacity to reduce. The highest priority for all is the stopping of burning of the rice stubble which is estimated at contributing about 40% to the air pollution in the North of the country. Rice stubble is very thick and difficult to manage. The "Happy Seeder", which has flails to smash the rice stubble before direct drilling the wheat, has been developed by the agricultural researchers and been taken up by approximately 25% of the farmers .



The Happy Seeder allows farmer to direct drill the wheat into the smashed rice stubble

The dropping water table in the region. Farmers have open access to ground water and irrigate with either flood or furrow irrigation. There is an associated decline in soil fertility which is starting to become noticeable to some farmers and researchers.



Preparation of cattle manure and urine to send to the digester. This will be added to the irrigation water to fertilise the fields.

Increasing soil organics matter and improving water use efficiency can be achieved with sustainable techniques such as understory planting, row cropping between sugar cane, recycling cattle waste through digesters and then added the resultant brew to the irrigation water.

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The group saw a number of variations of this practice. Cattle waste is a major resource in India where cattle are kept on farm for dairy products and are housed in sheds where the faeces and urine can be easily collected.

The group visited many different farms and business including citrus (Kinnow) orchards, zero input farms, organic fruit and vegetable growers and retailers, a rice miller, a wholesale vegetable and flower seed producer, some conventional village and larger farmers, and consultants that have interest in looking at farming options in the Top End. The cultural experiences of the trip were many and varied. We got to see the Sikh Golden Temple, shop on the main street of Ludianna and enjoy traffic that was truly next level.



The spiritual farmer and his organic Kinnow (citrus) crop with outstanding quality and productivity was one of the many farms visited.

The knowledge exchange workshop was held at the Central University of the Punjab at Bathinda on Day 8 of the trip. The workshop was well attended with over 100 people from the university and surrounding farming area attending including about 40 farmers. Representatives from Australia and India gave presentations and the content was questioned by the audience. Further discussions continued over lunch.



Knowledge exchange workshop



Greg Owens presents at the knowledge exchange workshop

In the next episodes I will go into more detail on some of the farms and businesses we visited and the great cultural experience we all enjoyed. There will be a group of these Punjabi farmers coming to the NT next year, probably in May/June, who are looking to engage with NT growers to broaden their perspective and knowledge of farming systems.



Transporting cotton crop to market



Sacks of rice ready for distribution