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Session - Transition towards agroecological practices
REGENERATION TECHNIQUES OF ABANDONED FARMLANDS INTO ORGANIC FARMLANDS

Katsuaki Takahashi¹, Ryoichi Komiya¹ and Organic Shizukuishi

¹Organic Shizukuishi, Shizukuishi, Japan

Summary: This paper proposes the regeneration techniques of abandoned farmlands into organic farms in order to expand organic acreage rapidly. Because only 4,000 farmers* have been certified by JAS [1]. The cultivated acreage of the JAS certified farms is 10,366 ha*, which represents only 0.3% of the total cultivated acreage in Japan. *as of 2016

Since 1955, due to the modernization of Japanese lifestyle of pursuing convenient and efficient life has changed many young peoples’ mindset in farming areas. They prefer enjoyable and high salaried life in big cities and towns to hard and low income one in farming areas. Then the Japanese Government, accelerated the policy of reducing farmlands acreage under cultivation. Fig. 1 shows the transitions of cultivated and abandoned land acreages.

Under these circumstances, we have proposed a project to Shizukuishi Town Hall about the regeneration of abandoned farmlands into organic

Disclosure of Interest: None Declared

Keywords: abandoned farmlands, increase of organic farmlands, no till cultivation, weed control
TRANSITIONING INTO COMMERCIAL PERMACULTURE FARM ON A DIVERSIFIED ZANZIBAR FARM

Mwatima Juma1, Ikram Soragha1 and Nachum Makame; Shaaban Kassim; Magali

1TOAM, Dar es salaam, Tanzania, United Republic of

Summary: The aim of this presentation is to demonstrate how permaculture with the principles of organic agriculture can influence farm design and management in Zanzibar. It outlines a case study of a small-scale, Zanzibar farm’s 45 years journey to develop a multi-enterprise system utilising organic and agroecological principles and practices. It describes the transformation from a shrubs with scattered indigenous trees property into a diverse ecological system food supply chain to the local community through pakacha(basket) delivery and to tourist hotels.

It discusses the importance of developing a comprehensive vision extending generations. This far-reaching vision obligates extensive planning and design. It also acknowledge on traditional knowledge and the dream of its founder who believe in the ability of life transformation through farming.

Disclosure of Interest: None Declared

Keywords: Msonge organic family farm, permaculture principles
**Topic 4 - Advisory services: How to take part in changing the agricultural model**

OWC2020-FAR-1235

**BURUNDI HEADING TOWARDS MORE ORGANIC COFFEE PRODUCTION: PATHING THE WAY TO PROMOTE THE ADOPTION OF AGROFORESTRY SYSTEMS**

Ernest Ndumuraro * 1

1CEO, COCOCA, Bujumbura, Burundi

**Summary:** A close cooperation of farmers, cooperative service units, other extension service suppliers, as well as governmental and non-governmental coffee institutions and bodies, marketing organizations and research institutions are cooperating to succeed and expand in the successful adoption of agroforestry systems in coffee production in Burundi.

Overcoming existing patterns of cultivation which are not adapted to climatic and soil conditions to preserve the natural resources by providing good marketing opportunities by selling organic and fair trade premium coffee and at the same time contributing to food security at household as well as community level.

After the successful implementation of a pilot project with two cooperatives and lessons learned the project is now extended to 2 cooperatives more converting to organic, but 13 more to establish agroforestry systems.

**Disclosure of Interest:** None Declared

**Keywords:** agroforestry, multi-stakeholder approach, Participatory Advisory Services
Session - Production and market diversification to increase farmers autonomy
**Topic 1 - Organic Farming holistic systems**

OWC2020-FAR-1270

**SPRING SOWN WINTER RYE USED IN CLOVER GRASS ROTATION SCHEME.**

Kjeld Forsom*, Hans Lund

*Husbandry, Økologirådgivningdanmark, Billund, Denmark

**Summary:** Springsown winterrye in clovergrass rotation is new standard for renewing pastures in intensive grazing systems on organic farms in Denmark. Using springsown winterrye seems preventing "cloverfatigue" and the staple near field can stay in grazing rotation. There are positive effect on milkproduction and nitrogenleaching.

**Disclosure of Interest:** None Declared

**Keywords:** Springsown winterrye, croprotation, grazing, cloverfatigue
**Summary:** There is renewed interest in crop diversification throughout the world. Health-conscious consumers are rapidly changing their diets and are creating a demand for new products.

Farm diversification could provide an additional income stream and thus more resilience in a volatile market.

I identified the following two crops with the best commercial potential for organic production and the most promising health properties – namely Yacon (Smallanthus sonchifolius) and Jerusalem artichoke (Helianthus tuberosus). Both crops are extremely high yielding and with proven health benefits.

A number of bioproducts can be derived from Jerusalem artichoke and yacon – inulin, fructooligosaccharides, fructose, natural fungicides, antioxidants and bioethanol.

Russian research showed that Jerusalem artichokes are able to absorb more carbon from the atmosphere than a forest making it a very interesting crop for the future.

**Disclosure of Interest:** None Declared

**Keywords:** Carbon sequestration, Crop Diversification, Healthy food crops, Novel Food Crops, Production of functional foods, Profitable crops
Topic 2 - Farmers empowerment and autonomy on their farm and on the market

OWC2020-FAR-949

**SYMBIOSE: LES LÉGUMINEUSES BIO AU COEUR DE L’INNOVATION ET DES FILIÈRES TRANSFRONTALIÈRES**

Jean-Baptiste Pertriaux* and Notre contribution sera réalisé par un travail de groupe, avec la proposition d’un binôme "agriculteur-conseiller"

*Bio en Hauts de France, Amiens, France

**Summary:** Face à une demande croissante en protéines végétales, la place des légumineuses dans les systèmes de grandes cultures bios est essentiel en particulier lorsqu’il n’y a pas d’élevage.

A travers un travail de coopération entre 4 centres de recherches et 3 structures de développement de l’agriculture bio, le projet SymBIOse apporte des éléments de réponses : aux producteurs et aux conseillers agricoles quant aux choix des espèces/varietés à implanter en association (céréales-légumineuses) ou en interculture dans les systèmes de production légumière.

**Disclosure of Interest:** None Declared

**Keywords:** autonomie azotée, Coopération, fertilité biologique, légumineuses, symbiose
Topic 4 - Advisory services: How to take part in changing the agricultural model

OWC2020-FAR-1014

THE EXPERIENCE OF VALUE ADDITION BY A SMALL ORGANIC FAMILY FARM: THE CASE OF INOUE FARM

Yumiko Fukui1, Yohei Inoue2, Ayako Inoue2

1ORGANIC HOUSE, Plusligon Corp, 2Inoue Organic Farm, Tamba, Japan

Summary: Agricultural diversification into processing or service helps an organic family farmer to increase its income. It is one of solutions for who have not strong physical strength like senior, female, handicapped or others, to make their livings in agriculture.

Disclosure of Interest: None Declared

Keywords: diversity, Processing and manuufactoring
**Topic 1 - Organic Farming holistic systems**

OWC2020-FAR-394

**NINBI FARM BREWERY**

Hortense Dessallien* 1

1peasant brewer, NINBI farm brewery, FONTANGES, France

**Summary:** NO ORGANIC WITHOUT PEASANT to make the link between the earth and human needs. Being this pivot puts great pressure on the farmer who manage the living towards a specific productivity. However, all these mechanisms are not only mechanical, they are also the result of a fine interaction between the kingdoms (mineral, vegetable, human). To obtain a production of organoleptic and organic quality compatible (compatible with human biology), the farmer goes through his own experiences and inconsistencies.

For our part, we settled ten years ago, outside the family, to create a brewery farm in cereal production and outdoor pig breeding on 16ha in the mountains of Cantal at an altitude of 900m. We only had beer in mind and now we are more than beer! We have the project to open PeasantPub so that our farm can feed the outside and vice versa. We experiment difficulties that allow us to refine our deep desire. There is nothing more exciting than to discover yourself by interacting with the living.

**Disclosure of Interest:** None Declared

**Keywords:** animal and vegetable companionship, barley collections, beers and lemonades of wild aromatic plants, coherence driven, workhorses
Session - Organic farming loves biodiversity: cultivating biodiversity and protecting wild biodiversity
DEVELOPMENT OF ORGANIC DAIRY CATTLE BREEDING – “BIO SEMEN STRAWS”

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Summary: In recent decades dairy cattle breeding has produced ever larger and more productive cows. Improvements in feeding and management have supported these increases in production. But organic and low input farms can often not well adapt feeding and husbandry to ever higher production performances. Appropriate AI-bulls for these farms are lacking. In Switzerland we started a new project in 2018.

A consortium of organic farmers and breeding experts created criteria to choose good bull mothers and bull calves from organic farms. Databases of the breeding organisations were screened with these criteria and we found around 400 cows of four breeds on organic farms fulfilling these criteria.

The farms will be visited and the best bull calves (10 of each breed) of these cows will be selected. Out of these 2 of each breed will be chosen as organic AI bulls. Semen straws will be sold by Swissgenetics, starting in 2021.

Disclosure of Interest: None Declared

Keywords: breeding strategies, organic AI-bulls
Topic 2 - Farmers empowerment and autonomy on their farm and on the market

OWC2020-FAR-1209

SEED SOVEREIGNTY IN NORTH EAST INDIA

Neelam Dutta*1 and Amadeus Zschunke
1Plant breeding, Sativa, Zurich, Switzerland

Summary: Indian farmers are losing their heirloom and indigenous seeds at a very rapid speed, due to the green revolution and massive globalisation. To safeguard indigenous seeds, I have started the first organic seed production and seed bank in North East (NE) India.

Our primary goal is to replicate the best adaptable varieties in our region, to provide all farmers with locally adapted seeds, and to train communities in organic and integrated farming and seed breeding.

Disclosure of Interest: None Declared

Keywords: Seed systems, organic seed, community agrobiodiversity management, participatory and decentralized breeding
**Topic 1 - Organic Farming holistic systems**

OWC2020-FAR-1352

**ACHIEVING SUSTAINABILITY AND BIODIVERSITY THROUGH ASSISTED NATURAL REGENERATION**

Vincer V. Quibral*1

1Glorious Land Ecofarm, Labo, Philippines

**Summary:** Sustainability can be realized by increasing biodiversity and revive ecological balance. A cheap and quick way of achieving biodiversity is through Assisted Natural Regeneration which is done by caring for naturally growing indigenous trees and plants. Biodiversity balances ecosystems which boosts productivity and controls infestations not only inside the farm but to neighbouring farms as well. By utilizing indigenous vegetables and plants, self-sufficiency and sustainability is within arm’s reach. Soil will be healed and maintained by regenerating resources such as grass and other plants. There are plants that can be utilized as pest control and green manure through mulching. Excesses from produce can be sold and processed to provide for other household's basic needs.

**Disclosure of Interest:** None Declared

**Keywords:** biodiversification, climate change, self-sufficiency, sustainable agriculture, systems thinking
Session - PGS around the world
LES TERRITOIRES FRANÇAIS DU PACIFIQUE: PRÉCURSEURS DE LA RECONNAISSANCE DES SPG EN FRANCE

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1Climat Change and Environmental Sustainability Division, Pacific Community (SPC), Noumea, 2Bio Caledonia, La Foa, 3Chambre d'agriculture NC, Nouméa, New Caledonia


Les SPG ont permis des échanges entre des communautés ayant peu d’occasion d’échanger, de partager des savoirs. Après une dizaine d’années d’existence et face à l’arrivée de nombreux nouveaux agriculteurs, un travail est mené pour faire évoluer le cadre du SPG en l’hybrident avec la certification par tiers.

À l’heure où l’agriculture biologique française se questionne sur son développement, sur l’émancipation des agriculteurs et des consommateurs, les initiatives mises en œuvre dans le Pacifique peuvent participer à cette remise en perspective des modèles de développement de la bio.

Disclosure of Interest: None Declared

Keywords: French Pacific Territories, Organic certification regulation, Participatory Guarantee System (PGS)
PARTICIPATORY GUARANTEE SYSTEMS (PGS) - EXPERIENCES OF COMMUNITY BASED AGROECOLOGY IN THE HIMALAYA MOUNTAINS

Ashish Gupta¹, Nachiket Udupa², Vikram Rawat¹

¹Founding Trustee, Gram Disha Trust, Delhi, India

Summary: Mountain ecosystems are fragile, susceptible to climate change, lack of resources for smallholders and at distance from markets. Monocultures in the mountain ecosystems are increasing making smallholders more dependent on markets for subsistence. Himachal Pradesh, in north India, is one of the ten Himalayan states in India, with the northern part of West Bengal and Assam also adding to two more geographies in the east.

In this paper we discuss the experience of implementing PGS in the Himalayan Mountains in India for smallholders. The working example of Kalasan Nursery Farm in the state of Himachal Pradesh under the PGS-India system and the market linkage mechanism using PGS-India. We present the current challenges for implementing PGS for smallholders and discuss mitigation strategies based on our experience.

Disclosure of Interest: None Declared

Keywords: agroecology, HIMALAYA, Market, MOUNTAIN, PGS, SMALLHOLDERS
Topic 2 - Farmers empowerment and autonomy on their farm and on the market

OWC2020-FAR-1374

SPG Y LA UNIVERSIDAD PÚBLICA, ESPACIOS DE APRENDIZAJE EN AGROECOLOGÍA

João P. Braga*1

1Orgânicos Sul de Minas, Pedralva, Brazil

Summary: Soy agricultor y participo en la construcción de Agroecología en la región de Pedralva, Minas Gerais, donde vivo y trabajo con mi compañera, Leticia. Todas las generaciones de mi familia han estado vinculadas a la agricultura, ahora es mi turno.

Mi aprendizaje en agroecología es el resultado de mi vida diaria con mi pareja en nuestro territorio, pero también en la transmisión oral por parte de mi abuelo y en la relación con otros agricultores que forman parte de lo Centro de la Asociación de Productores Orgánicos del Sur de Minas Gerais (OSM). En 2016, le surgió la oportunidad en el Programa de Posgrado en Desarrollo Sostenible y Extensión de la Universidad Federal de Lavras (UFLA), que comenzó a aceptar la experiencia como agricultor como uno de los criterios de selección.

Informaré algunos de los resultados de esta experiencia y cómo las actitudes como esta de PPGDE-UFLA pueden contribuir al avance de la transición a la agroecología y la valorización del agricultor.

Disclosure of Interest: None Declared

Keywords: Agroecología, Aprendizaje, Autonomía, Intercambio de experiencias, SPG, Universidad Pública
COLLABORATIVE PATHS TO CERTIFICATION FOR GERMAN DEMETER FARMS

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Summary: Demeter e.V.’s alternative certification project has allowed us to introduce something big, even radical, to our members and partners, and pilot a new approach to organic certification beyond PGS certification.

We are creating something our members have been requesting for years: an approach that puts the focus on farms and farmers, not checklists and inspections. Thus, we open ourselves up to a development that has the potential to bring vitality to the way we recognize our farmers’ accomplishments, foster the creating of high-quality products, and build vibrant social networks.

During the project, our participating farms receive their Demeter-certification following a rigorous, moderated farm development talk. Each year, for five years, we will add farms to the group until up to 100 farms are participating in 2022.

Disclosure of Interest: None Declared

Keywords: Biodynamic farming, collaborative, farmer-led, peer-to-peer, PGS
**Topic 2 - Farmers empowerment and autonomy on their farm and on the market**

**OWC2020-FAR-1283**

**PGS: MECHANISMS OF EMPOWERMENT AND AUTONOMY?**

Evelyn M. Nascimento¹, Romeu M. Leite² on behalf of FBSPGOCs, Fernanda Fonseca³ on behalf of FBSPGOCs and Fórum Brasileiro de SPG e OCS

¹ABIO, Barra do Piraí, ²ANC, Jaguariúna, ³PESAGRO-RIO, Nova Friburgo, Brazil

**Summary:** Twenty years past the first regulation of organic farming in Brazil, which recognizes different certification systems (PGS at the same level as a third party certification), one can think now about the bureaucratic consequences that the government mandates, like certification for indirect markets.

With the innovation of information technology and the participatory mechanisms of the promotion of organic markets and promoters of joint producers-consumers, it’s time to rethink and change. This text intends to bring reflections and suggestions.

**Disclosure of Interest:** None Declared

**Keywords:** Direct marketing, Guarantee Systems, Regulation
**Topic 2 - Farmers empowerment and autonomy on their farm and on the market**

**OWC2020-FAR-985**

**PGS AND SOLIDARITY MARKETING: BRINGING FARMERS AND CONSUMERS CLOSER**

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**Summary:** ABIO - Association of Biological Farmers of Rio de Janeiro State - some years ago implemented its Participatory Guarantee System and organized the Carioca Organic Fairs Circuit. The two initiatives, articulated, promote and strengthen the autonomous organization of farmers and the establishment of alliances with consumers, contributing to food security through organic agriculture.

The Association's structure and processes have been established to allow decisions to be in farmers' hands, connected to each other in internal collectives, and to consumers by direct selling and ensuring the organic quality of products by the Participatory Guarantee System.

The organization in Groups to evaluate and decide on the organic quality of products through PGS led to the establishment of relationships of trust between farmers aiming at cooperative marketing in solidary marketing groups that operate in organic fairs.

**Disclosure of Interest:** None Declared

**Keywords:** Direct sale, Farmers association, local market
Session - Holistic organic farming systems
best examples
**Topic 1 - Organic Farming holistic systems**

OWC2020-FAR-978

ORGANIC WALNUTS AND SHEEP MILK CHEESE PRODUCTION. A MODEL OF REGENERATIVE AGRICULTURE IN CHILE,

Francisco Cornejo Soms* 1, Marisol Navarro Rojas2, 3

1Francisco & Marisol Organic Farm, Calera de Tango, Chile, 2Farming, 3Sales, Francisco & Marisol Organic Farm, Calera de Tango, Chile

**Summary:** Our farm is a model of agro ecological sustainability inserted at an urban neighborhood. We produce organic walnuts and we produce our own fertilizers and soil bio remedies. Incorporating permanent cover crops we have been able to attract insect eating birds and several different species of natural enemies and through enhancing the biological activity of the whole farm it have been able to reduced the pest problems.

Today there is No needs for aphids' control. No copper as fungicide. Legumes in cover crops helps to fix Nitrogen and feed the sheep. Mycorrhizas stimulates root development. Earthworm’s eggs are distributed through the irrigation and today earthworms are present at all over the soils of the farm

We hope that through sharing our productive experiences with other groups of farmers will be a real contribution to stimulate an increasing number of organic walnut producers, whom will have the economic benefits for their entire family group, their social and farming environment.

**Disclosure of Interest:** None Declared

**Keywords:** Organic Walnuts, Sheep milk cheese and Regenerative Agriculture
**Topic 1 - Organic Farming holistic systems**

OWC2020-FAR-951

**AGROFORESTRY SYSTEMS, FOOD PRODUCTION FROM FOREST LOGIC**

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**Summary:** Agroforestry is a production system where "Agro" comes from the act of farming the land and "forest" from it is a system based on the principles of the forest. Agroforestry systems can occur in different regions and climates, as long as they respect and follow the logic of the forest, which has general and specific characteristics according to its region, as well as being well planned and executed according to its principles.

The aim of this paper is to present the agroforestry system using as an example my farming work in Brazil like a woman and young farmer, where I produce vegetables, fruits, mushrooms, yerba mate and medicinal herbs as main products and sell them at a weekly street market, but besides sharing my experience, show and prove that agroforestry can be a possible and applicable technique in different regions of the world, producing food, recovering and working for the environment at the same time.

**Disclosure of Interest:** None Declared

**Keywords:** agroforestry, agroforestry systems, food security, production, woman empowerment, youth in agriculture
INTEGRAL AGROECOLOGICAL FARMS AS A MECHANISM FOR ADAPTATION TO CLIMATE CHANGE IN THE ANDES OF PERU

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1Manager, Granja Agroecológico Bello Paraíso S.R.L., Abancay, Peru

Summary: The experience deals with the implementation of agroecological practices in the Bello Paraíso farm in the Andes of Peru and subsequently disseminated as an agroecological promoter carrying out tasks of implementing agro-ecological practices from work in non-governmental entities for more than 10 years.

The Bello Paraíso agroecological farm is a family farm dedicated to the agroecological production of Andean crops, grains, vegetables, medicinal plants, cattle, bees, guinea pigs, etc. It implements various agroecological practices such as soil conservation through platforms, terraces of absorption and slow formation, water management through pressurized irrigation techniques, agro-biodiversity conservation, forest management, production of organic fertilizers, use of inputs local and agrotourism development.

Integral farms produce a variety of crops and farms that provide families with a high quality of food and allow the generation of additional economic income through marketing through participatory certification to local markets. The agroecological practices implemented have allowed adaptation and resilience to climatic events such as frost, hailstorms, torrential rains, winds, droughts.

Disclosure of Interest: None Declared

Keywords: agroecology, biodiversity, climate change, Participatory Guarantee Systems
Topic 1 - Organic Farming holistic systems

OWC2020-FAR-936

ECOLO-ECONOMIZATION -BEYOND JUST ORGANIC

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Summary: Peermade Development Society (PDS) is an NGO working in Idukki district of Kerala, India, in the field of sustainable development of village communities, especially vulnerable groups (tribal, women and marginal farmers). Ecolo-Economization is a concept envisaged by the Peermade Development Society for addressing the problems emerged due to green revolution, the industrialised agriculture in India.

The term ecolo-economization envisaged by PDS refers to “Localised action on rebuilding local ecology in tune with global focus, integrating economic sustainability of ecosystem service providers”. The ecosystem service providers are farmers, local communities including tribals and the local ecosystem. Over the period of experimentation and trials, PDS has developed comprehensive and holistic packages of organic farming with focus on ecology, rather than just chemical free organic products for human consumption.

All actions towards ecosystem rebuilding at farm level are to be linked to an economic activity. PDS focussed on “Localization” wherein local problems need localised solutions. The initiative is called “Land to Lab” where innovative farmers (technologists) develop innovative technologies for farming. For soil protection from erosion, they plant vetiver grass (aromatic grass of the region), but the leaves, otherwise used as mulch in the farm, are used for basket/spices gift box making, thereby bring additional income to women in the farms.

Farmers are encouraged to identify climate resilient local varieties existing in their farms, and the performance of these farmer plant varieties are scientifically validated, recorded and popularised by PDS. These varieties are named after their family names of farmers, consciously to popularise the farmer innovator and boost his self-esteem. 10 farmer varieties of pepper, 3 of Nutmeg, One of ginger, 6 of cardamom have been identified, scientifically validated and popularise under Plant Variety Protection & Farmer’s Rights Act (PVP&FRA 2001). These farmers make nurseries for multiplication of their varieties, thus making additional income through nursery entrepreneurship.
Similarly, farm implements/equipment and farm machineries suitable for the local farming situations such as cardamom washing machine, cardamom dryers, nutmeg shell cracking machines, pepper threshers, Arrow root and turmeric powdering cleaning and powdering machines are evolved locally by farmers and converted to farmer entrepreneurship. Farming practices such as multiple root stock grafting, *Moringa* leaf based rooting hormones, composting process, insect repellents etc. has been documented and made into entrepreneurship to support farming and ecology.

Different local species of plants have been intercropped which could be used for making of on farm- manures, herbal decoctions and plant growth promoters and organic pesticides based on traditional knowledge and based on Indian plant science called Vrikshayurveda. Biodiversity based economic activity include homestead vegetable farming, multilayer cropping systems, multiple farming integrating livestock, poultry, pisciculture.

Cultivation of medicinal plants and herbs that could reduce pests and nematode infection in crops within farm and also that could be linked up with herbal/Ayurvedic medicine manufacturers are designed focusing on health and wellness of the rural community, both as home remedies and as ayurvedic medicines. Bio-fencing using 7 selected flowering plants of the region (*Hibiscuss, Ocimum, Antigonan, Chrysanthimum, Indigoferra, Ixora, Ricinus*) were selected to ensure flowering throughout the year so as to encourage foraging by bees and other pollinators to support crop pollination as well as to add apiculture as one of the economic activity in the farm. Thus all ecological activities contribute to the economic sustainability of the farm and this is PDS’s Ecolo-Economization model.

**Disclosure of Interest:** None Declared

**Keywords:** Ecosystem services, Health and wellness, On-farm biodiversity, Pollinators and predators, Soil health
Topic 1 - Organic Farming holistic systems

OWC2020-FAR-1368

ORGANIC GRAZING APPLYING HOLISTIC MANAGEMENT AS THE MODEL

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1Mahalko Dairy Organic Grazing Acres, Gilman, United States

Summary: I am Kevin Mahalko, an organic dairy farmer from the Upper Midwestern US State of Wisconsin. My main interest is to bring our organic grazing perspective to the Organic World Congress. I have been involved in the managed grazing movement since the 1990s, and this was my main introduction into Organic Agriculture.

I come from a multigenerational small dairy background, and our family has overcome many challenges to thrive as small farmers in the dairy market and now the growing organic market. We are happy to farm as organic farmers who are enhancing the sustainable impact of our farm.

We produce healthy milk from healthy cows, and we see many improvements to our environment and farming community as we learn to manage organically to create a better future worldwide.

I am submitting a contribution within the Farmers and Advisors Forum with the Theme number 1 Organic Farming as a Holistic System.

Disclosure of Interest: None Declared

Keywords: Farmer
DE L'AGRICULTURE BIOLOGIQUE A L'AGROECOLOGIE PAYSANNE

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Summary: L'agriculture biologique qui a démarré par un mouvement sociétal est devenu un marché défini par des normes d'entrée et de fonctionnement (règlement EU 2018/848). Pourtant le mouvement sociétal est toujours présent et actif.

Dans cet article nous resitutions la notion d'agroécologie paysanne, portée entre autre par la Via Campessina. Nous présentons l'association Nature & Progrès, pionnière de l'agriculture biologique en France.


Nous souhaitons présenter et alerter sur une bifurcation de plus en plus importante entre l'agriculture biologique officielle et le mouvement social. Ce dernier se reconnaît de plus en plus dans l'agroécologie paysanne et la souveraineté alimentaire des populations locales.

Disclosure of Interest: None Declared

Keywords: agriculture biologique, agroécologie paysanne, Mouvement social, Nature & Progrès, Souveraineté alimentaire
Session - Organic resilient fruit production
**Topic 2 - Farmers empowerment and autonomy on their farm and on the market**

OWC2020-FAR-544

**INTEREST OF FRUIT GROWERS FOR ASSESSING BIODIVERSITY**

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1 GRAB, Avignon, 2 IFPC, Sees, France, 3 LAAPC, Riga, Latvia, 4 CRAW Gembloux, Gembloux, Belgium, 5 Laimburg Institute, Laimburg, Italy, 6 SLU, Stockholm, Sweden, 7 JKI, Dossenheim, Germany, 8 INHORT, Skierniewice, Poland, 9 FIBL, Frick, Switzerland, 10 VÚRV, Praha, Czech Republic, 11 UCPH, Copenhagen, Denmark

**Summary:** Farmers often hesitate to develop Functional Agrobiodiversity (FAB) on their farm, for they can't measure the return on investment. Consequently, ecological infrastructures are hardly considered as a priority, although farmers seem interested.

During the Ecoorchard project, partners developed four simple tools to assess biodiversity, according to technical choices applied to the orchard. By using these tools, they can better understand how their choices influence natural biocontrol. The method proposed is intended to help them assessing beneficial insects dynamics, according to their own cultural and biodiversity practices. By observing real impact, tools shall be more incentive to better consider FAB in their plot, and finally reduce their reliance to plant protection treatments.

**Disclosure of Interest:** None Declared

**Keywords:** agroecology, biodiversity, floral strips, fruit growing, infrastructures
COMPARACIÓN ECONÓMICA Y DE FERTILIDAD DEL SUELO EN HUERTAS DE AGUACATE ORGÁNICO Y CONVENCIONAL, EN EL MUNICIPIO DE AÑO DE ROSALES, MICHOACÁN, MÉXICO.

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Resumen: El municipio de Ario de Rosales se ubica en el estado de Michoacán, México (centro oriente del país), la principal actividad es la producción de aguacate, y el grueso de productores lo realiza bajo la agricultura convencional. Hoy en día existe preocupación entre los productores por los problemas de salud que se reportan en la zona, y a pesar de eso aún siguen aplicando productos químicos, debido a que piensan que la agricultura orgánica tiene menores rendimientos y, por tanto, menores ganancias.

En el municipio son pocos los productores que practican la agricultura orgánica y no tienen más de 16 años realizándola. Ante esta problemática, se decidió realizar esta investigación, donde el objetivo fue comparar la producción convencional y la producción orgánica, en los conceptos de costos de producción, relación beneficio-costo y fertilidad de suelo.

Los datos económicos se obtuvieron mediante entrevistas a los productores, estos fueron seleccionados en función de compartir información de manejo y permitir el muestreo del suelo para los análisis de fertilidad. Los resultados fueron que la agricultura orgánica tiene una relación beneficio-costo mayor a la convencional, 7.59 y 3.68 correspondientemente. Además, genera 22.17% (€ 5,585.55) más de ingresos que la convencional, tiene menores costos de producción 47.64% (€ 3,470.71) y mejores precios en venta, a saber, 25% más en precio Premium.

Todo esto le permite ser más rentable aun teniendo menores rendimientos todavía. En cuestión de fertilidad los suelos bajo manejo orgánico tienen mayor contenido en materia orgánica (0.84%), mejor relación Ca/Mg (4.41 orgánico y 2.72 convencional), y mayor contenido de elementos nutricionales: P, K, Ca, Mg, Fe, Zn, Mn y B. Esta investigación ayudó a convencer a productores convencionales del municipio a practicar la agricultura orgánica.

Disclosure of Interest: None Declared
Session - Collaborative approach for resilient food systems: farmers autonomy
**Topic 2 - Farmers empowerment and autonomy on their farm and on the market**

OWC2020-FAR-1427

**GROWING FOOD AND LOSING OUT: THE COMPLICITY OF CLIMATE CHANGE, URBANIZATION AND PRODUCTION -ORIENTED AGRICULTURE**

Stephen W. Waikwa* 1

1Nyeri Ecological Farmers self-help Initiative, Nyeri, Kenya

**Summary:** Kenya is currently at crossroads. The country has become a net food importer due to several factors associated with agricultural production policies, food production practises and farmers being held captive by cheap foodstuff imports at the expense of the local farmers. Climatic variations due to enhanced global climate change, has brought a paradigmatic shift in overall food production.

On the periphery of this all is accelerated urbanization around farming communities and the threat of production-oriented high value crops destined for the export market. The dichotomy is stark!

**Disclosure of Interest:** None Declared

**Keywords:** climate change, food deficits, paradigmatic shift, production oriented, urbanization
**Topic 3 - Farmers commitment in favour of the social dimension of organic farming**

OWC2020-FAR-662

**UN GROUPEMENT D'EMPLOYEURS POUR LEVER LES FREINS A L'EMBAUCHE DANS LES FERMES BIO : 50 000 HEURES DE TRAVAIL ANNUELLES DANS UN TERRITOIRE SOCIALEMENT DEFAVORISE. OU COMMENT LA BIO REVALORISE LE TRAVAIL EN AGRICULTURE**

Cany Veronique*¹, HALLEZ Simon²

¹Bioteam, Gouzeaucourt, ²Bio en Hauts-de-France, Phalempin, France

**Summary**: Le collectif, moteur de la réussite des producteurs bio

La Bioteam a misé sur le collectif pour lever les freins à la conversion bio: mutualisation d’assolement, CUMA matériel, CUMA de conditionnement et groupement d'employeurs pour lever les freins à l'embauche dans les fermes bio du territoire.

**Disclosure of Interest**: None Declared

**Keywords**: Adapter son système de production aux salariés, Coopération, Emploi, Groupement d'employeurs, Nouvelles compétences managériales
Topic 2 - Farmers empowerment and autonomy on their farm and on the market

OWC2020-FAR-1223

DES SERVICES ET DISPOSITIFS POUR LES PRODUCTEURS, LES PREMIERS GARANTS D'UNE AGRICULTURE BIOLOGIQUE DURABLE ET COHÉRENTE

Laetitia Leray* ¹

¹Forebio, Paris, France

Summary: La parole sera donnée à un agriculteur bio, adhérent d'une fédération de groupements de producteurs bio nationale afin de donner un aperçu des initiatives qui sont menées pour promouvoir un modèle agricole autonome dans lequel les agriculteurs se retrouvent. Comment capter plus de valeur ajoutée sur les fermes?

Quels accompagnements existent pour encourager les fermes bio à être plus compétitives et autonomes?

Quelle place est laissée aux producteurs dans ces systèmes économiques et agricoles en constante évolution? L'objectif de cette présentation sera de répondre à ces questions par des illustrations concrètes.

Disclosure of Interest: None Declared

Keywords: Autonomie, Compétitivité, Groupement de producteurs, Valeur ajoutée
Topic 1 - Organic Farming holistic systems

IMPLEMENTACIÓN DE UNIDAD EXPERIMENTAL DE CAFÉ AGROECOLÓGICO EN UNA COOPERATIVA DE AGRICULTORES FAMILIARES

Leonardo Noronha*1
1COOPFAM, Poço Fundo, Brazil

Summary: El enfoque agroecológico propone cambios profundos en los sistemas y formas de producción. La raíz de este cambio es la filosofía de producir de acuerdo con las leyes y dinámicas que rigen los ecosistemas, una producción con y no contra la naturaleza. Trabajar ecológicamente significa administrar los recursos naturales respetando la red de la vida. Siempre que el manejo agrícola se lleva a cabo de acuerdo con las características locales del medio ambiente, cambiándolas lo menos posible, se aprovecha el potencial natural del suelo. Por esta razón, la agroecología depende en gran medida de la sabiduría de cada agricultor desarrollado a partir de sus experiencias y observaciones locales.

La producción del café orgánico ha estado creciendo entre diferentes perfiles de productores, pero es entre los pequeños productores que este modelo de producción tiene su mayor potencial. Los pequeños productores pueden implementar mejor el café orgánico y agroecológico sostenible porque conocen mejor su propiedad y pueden trabajar de manera más eficiente con prácticas que intensifican su producción.

Por lo tanto, mediante la implementación de unidades de producción agroecológicas del café, el objetivo es difundir métodos eficientes de producción orgánica y agroecológica que ayuden a aumentar los ingresos del productor, diversificar la producción y al mismo tiempo promover la preservación del medio ambiente, así como la promoción de la salud y bienestar del productor, su familia y toda la comunidad.

Disclosure of Interest: None Declared

Keywords: agricultura familiar, agroecología, café orgánico, sistema agroflorestal
**Topic 2 - Farmers empowerment and autonomy on their farm and on the market**

OWC2020-FAR-941

**FARMER FAMILY LEARNING GROUPS: EMPOWERMENT, SOCIAL CAPITAL AND BETTER CONTROL OVER FOOD AND AGRICULTURE**

Mette Vaarst1, Thaddeo Tibasiima* 2, Aage Dissing3, Inge Lis Dissing3

1Aarhus University, Tjele, Denmark, 2SATNET, Fort Portal, Uganda, 3Organic-Consult, Brovst, Denmark

**Summary:** Participatory Farmer approaches are key in building resilience and implementing organic/agroecological practices particularly among smallholder farmer families. In Uganda, Farmer families and local communities have worked since 2009 to improve their livelihoods and environments through organic farming and joint community development, using ‘Farmer Family Learning Groups’ (FFLG), which is a participatory approach that involve entire families who work together in a rotational system guided by an external and internal facilitator.

It is a flexible approach: each FFLG decides own goals and working mode. Creating and maintaining resilience at all levels is a main focus of FFLGs through organic and agroecological farming which explicitly addresses this at all levels, e.g. in relation to social, environmental, farming systems, financial and general livelihoods.

During the past ten years, FFLGs have developed in many different ways, shaped by and developing in respect to the local context. Joint marketing activities were also established in terms of several FFLGs bringing their produce together for sell in a "Marketing Association (MA)." Despite challenges, many MAs managed to successfully reach favorable markets.

**Disclosure of Interest:** None Declared

**Keywords:** Food Sovereignty, social learning, Participatory.
Session - Animal welfare from birth to death
SUMMARY: Les prairies naturelles, qu'elles soient séchantes, d'altitude ou humides, présentent de nombreuses vertus environnementales et zootechniques. Cependant, les rendements de ces prairies sont souvent faibles, ou bien les conditions d'exploitation difficiles limitent l'accès des animaux à la ressource.

C'est dans l'objectif de se rapprocher au mieux de ces prairies naturelles que le concept de prairie-pharmacie a été créé. Riches en plantes à tanins et en plantes aux vertus digestives, les prairies pharmacie permettent aux éleveurs de ruminants de diversifier la flore disponible et de laisser les animaux développer leur comportement naturel de préhension alimentaire spécifique.

Autre avantage, les prairies pharmacie sont riches en chicorée et en plantain, 2 plantes au système racinaire pivotant, véritable arme pour lutter contre le dessèchement de la prairie en période de sécheresse.

DISCLOSURE OF INTEREST: None Declared

KEYWORDS: changement climatique, diversité écologique, écosystème, fourrage, prairie multiflore, résilience
QUAND L'OUVERTURE DE LANDES EMBROUSSAILLÉES GENÈRE UNE DISTILLERIE À HUILES ESSENTIELLES ET À HYDROLATS POUR LES SOINS DES ANIMAUX DE LA FERME

Eric Darley* 1
1ALAMBIC DU LARZAC, Nant, France

Summary: Installé sur une ferme comprenant beaucoup de landes, j'ai profité de leurs nettoyages pour valoriser les huiles essentielles des résinex coupés. Cela m'a permis d'acquérir des connaissances avec l'usage de mélanges aromathérapeutique sur mes animaux avant de les proposer à d'autres.

Un groupe d'éleveur et de vétérinaire de ma région à participé à l'amélioration des préparations. Le frein majeur est la réglementation qui est mal adapté au contexte. Une solution serait l'acception d'une liste déjà existante de produits naturels non préoccupants utilisables par tous.

Disclosure of Interest: None Declared

Keywords: HUILES ESSENTIELLES, HYDROLATS, PRODUITS D'ORIGINES NATURELS, RESINEUX, SANTE GLOBALE
**Topic 2 - Farmers empowerment and autonomy on their farm and on the market**

OWC2020-FAR-1190

ESSENTIALS OILS AND HYDROLATS TO SUPPORT THE HEALTH OF LIVESTOCK

Eric Darley ¹

¹Darley Eric, Nant, France

**Summary:** Dans le contexte actuel de la résistance aux antibiotiques, aux vermifuges et aux pesticides, le recours aux huiles essentielles & aux hydrolats est une solution d'avenir pour les soins aux animaux. Ces produits naturels qui peuvent être produits par les agriculteurs sont facile de conservation et d'utilisation, validés par la tradition et commencent depuis quelques dizaines d'années à être étudiés par la science.

L'utilisation préventives de ces produits multi-usage dans la conduite des troupeaux permettraient de diminuer les problématiques de santé, de qualité de vie des animaux et des personnes vivant à leurs contacts. La production de ces produits permettrait aussi l'installation de producteurs, et distillateurs de plantes aromatiques et médicinales. Un changement de statut réglementaire s'impose pour l'usage des plantes et produits issus de ces plantes.

**Disclosure of Interest:** None Declared

**Keywords:** essentials oils, health herd, hydrolats
**Topic 2 - Farmers empowerment and autonomy on their farm and on the market**

OWC2020-FAR-391

**MOBILE SLAUGHTER UNITS TO IMPROVE ANIMAL WELFARE AND STRENGTHEN SHORT FOOD SUPPLY CHAINS**

Paul Verbeke¹, Mariella Debille², Hilde Vervaecke², Ann Detelder³, Sylvie La Spina⁴

¹BioForum Vlaanderen vzw, Antwerpen, ²Odisee University College, Sint-Niklaas, ³Steunpunt Korte Keten, Wijgmaal, ⁴Nature & Progrès Belgique, Jambes, Belgium

**Summary:** The feasibility study of a mobile slaughter unit in Flanders (Belgium) arose from the observation that (organic) livestock farmers who slaughter for direct sales often have a problem finding an (organic-certified) slaughterhouse at an accessible distance. Smaller slaughterhouses have closed and larger slaughterhouses are often not equipped or willing to slaughter a smaller number of animals.

An MSU seems to be a good alternative to transporting farm animals to abattoirs at a potentially high animal welfare cost. Avoiding animals’ stress associated with transport may also result in a better meat quality. An MSU was found to be practically and technically feasible.

Legislation regarding food security, waste management, etc... complicates the implementation of a MSU, but does not make it impossible. The main obstacle to implement a MSU is the high investment and operational cost.

Based on this feasibility study a MSU for poultry will be put into practice in 2020 in Flanders.

**Disclosure of Interest:** None Declared

**Keywords:** Animal welfare, Mobile slaughter unit, short food supply chains
**Topic 1 - Organic Farming holistic systems**

OWC2020-FAR-1200

**CONTROLLED WEANING IN DAIRY SHEEP AND GOAT FARMS**

Antonio Compagnoni*1, marcello volanti1, sofia Termatzidou2

1ICEA, BOLOGNA, Italy, 2AUTH, Tessaloniki, Greece

**Summary: Study question:** How to get more milk for the farmer (while respecting EU organic Regulation on weaning of the lambs and kids), maintaining the welfare of mother and lambs/kids and having them healthier.

**Disclosure of Interest:** None Declared

**Keywords:** controlled weaning; kidergarden for kids and lambs; saving milk and manpower; respecting organic rules
Topic 1 - Organic Farming holistic systems

OWC2020-FAR-577

ORGANIC PIG PRODUCTION - MEETING CURRENT AND FUTURE DEMANDS: INNOVATIVE, HIGH ANIMAL WELFARE AND ENVIRONMENTALLY, SOCIALLY AND ECONOMICALLY SUSTAINABLE.

Bertel Hestbjerg¹, Erik Fog²

¹ Organic farmer, Holstebro, Denmark (presenter), ² Organic Innovation, SEGES, Aarhus N

Summary: The growing organic market and centralized food distribution systems are challenging the organic farmers. Efficiency and market adaptation must be combined with the principles and standards of organic production.

Hestbjerg Økologi is a successful Danish example of a big organic farm specialized in pig production with a range of initiatives that secure animal welfare, climate friendly production, high sustainability - environmentally, socially and economically, and with several initiatives in the pipeline.

Agro-forestry ensures high welfare for the sows and the piglets on the fields. The trees also safeguard against nitrate leaching and deliver wood for energy production.

The fattening pigs are offered "wellness areas" to support their natural behavior.

A good social life among the 27 employees, including a vet, is a natural priority.

Own brands ensure important consumer feedback on preferences and expectations.

Next step is to be self-sufficient with locally produced grass protein.

Disclosure of Interest: None Declared

Keywords: agroforestry, Animal welfare, Local protein sources, social responsibility, Sustainability
Session - Collaborative approach for resilient food systems: seeds
Topic 1 - Organic Farming holistic systems

OWC2020-FAR-1184

"CLIMATE WINDOW PROJECT" - PROMOTION OF ORGANIC PLANT BREEDING THROUGH PARTICIPATORY EXCHANGE BETWEEN FARMERS AND BREEDERS

Nicole Bischofberger* 1, Monika Baumann2, Herbert Völkle2

1Seestrasse, 6, 2Getreidezüchtung Peter Kunz, Feldbach, Switzerland

Summary: Climate change, the drastic decline in biodiversity and the monopolisation of the seed market make organic breeding more important than ever. To raise farmers' awareness of organic breeding, gzpk has launched the "Climate Window" project. For around 30 farmers, a climate window with 18 different cereal types and varieties was sown by gzpk in their existing cereal fields.

The farmers are instructed throughout the year in various plant observation exercises and report their assessments back to gzpk. The participatory approach promotes the exchange between farmers and breeders, the understanding of organic plant breeding and trains the breeder's eye.

Disclosure of Interest: None Declared

Keywords: biodiversity, organic production, environmental sustainability, climate change, farmer's awareness, organic breeding, Participatory Breeding
WHAT APPROACHES TO PLANT AND SEED HEALTH FOR ORGANIC AGRICULTURE?

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Summary: A wide range of different, sometimes mutually exclusive, approaches to plant health exist and are practiced within organic farming and seed systems. For instance, plant health management may seek to completely exclude plant pathogens from growing environments and seed systems in a mechanistic, reductionist perspective.

On the other hand, it may also aim at relying on resilient cropping systems, including plant defense mechanisms and complex microbial communities in a more holistic approach. How organic communities define and manage plant health will have implications on the design of organic seed systems and farm agroecosystems, as well as on future research agendas.

Debates on approaches to plant health have been sparked within community seed networks in France and Belgium. We propose to share and widen the debate to broader organic systems from an international perspective in the framework of an interactive, multi-actor forum at OWC2020.

Disclosure of Interest: None Declared

Keywords: management approaches, organic agriculture, plant health, seed health
THE PROCESS OF PARTICIPATORY PLANT BREEDING IN THE RESEAU SEMENCES PAYSANNES

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Summary: In a context where seed breeding activity has been moved away from farms and peasants by agro-industry, some initiatives allow farmers to re-appropriate seeds and know-how, and thus develop cultivated biodiversity.

This is the case of collaborative selection and breeding occurring in the Réseau Semences Paysannes. It's a process in which peasants groups conduct trials in their fields, accompanied by researchers, in order to select peasant seeds, population varieties or mix, adapted to their soil, needs and practices.

This participatory breeding model, inherited from the experiences of South American farmers' networks, disrupts the very vertical pattern of the organization of French agriculture and agricultural research.

Disclosure of Interest: None Declared

Keywords: collaborative research, cultivated biodiversity, participatory plant breeding, peasants' network, peasants' seeds
Topic 2 - Farmers empowerment and autonomy on their farm and on the market

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ON-FARM ORGANIC PLANT BREEDING IN GERMANY IN TIMES OF CLIMATE CHANGE

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Summary: Climate change is urging to reevaluate crop species and varieties and to develop new ones. Drought-tolerant species must be cultivated on a larger scale in organic farming systems. In addition, intercrops benefit from the longer growing season in winter and better water supply. Naturland farmers contribute to the adaption on changing environmental conditions by testing new and old crop species and varieties on their farms.

Winter peas can use the water supply in winter and Naturland farmers have successfully reintroduced old and new varieties of this crop in Germany and Austria. Drought-tolerant proso millet and a Faba bean population have also been reintroduced. Perennial wheat is a new crop, but lines with a compromise between yield and persistence have already been found.

On-farm breeding and testing a wide range of varieties and species on farms has great potential to adapt organic farming to the changing conditions caused by climate change.

Disclosure of Interest: None Declared

Keywords: drought-tolerant species, faba bean, perennial wheat, plant breeding, Varietal evaluation, winter peas
Topic 2 - Farmers empowerment and autonomy on their farm and on the market

OWC2020-FAR-370

RESEAU SEMENCES PAYSANNE: HISTORY AND CURRENT CHALLENGES OF THE FRENCH PEASANTS’ SEEDS NETWORK

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Summary: The purpose of the Réseau Semences Paysannes, created in 2003, is to bring together stakeholders in cultivated biodiversity in order to promote the dissemination of peasant seeds and associated know-how; develop and promote the in situ dynamic; implement any other actions that may contribute to it. The RSP places people and the living world at the core of its projects with a common political objective: a social, peasant and ecological agriculture rooted in the territories.

For the past 15 years, the farmers and gardeners of the network have actively participated in the recognition of peasant seeds and their actors. Today, the RSP, confronted with appropriation attempts of its long-term collective work, is inventing alternatives to deal with it. The change in governance, being as close as possible to the territories, ans the vision of peasant seeds as « commons » are explored to continue to keep seeds alive and developed in the fields, while promoting meetings between practitioners.

Disclosure of Interest: None Declared

Keywords: cultivated biodiversity, farmer autonomy, peasants’ network, peasants' seeds
**Topic 2 - Farmers empowerment and autonomy on their farm and on the market**

OWC2020-FAR-821

**PARTICIPATORY DESIGN OF LENTILS’ CULTIVAR MIXTURES, A PHD PROJECT WITHIN LEGVALUE H2020**

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¹Istituto Scienze della Vita, Scuola Superiore Sant’Anna, Pisa, Italy

**Summary:** The research project is carried out within the research Group of Agroecology at Sant’Anna School of Advanced Studies (Pisa, IT).

The project aims at answering to the challenges of lentils cultivation through the exploitation biodiversity, involving a group of legumes farmers in the research activities according to Participatory Action Research (PAR) methods.

Workshops are organized between farmers and scientists aiming at defining study topics and at evaluating a set of genetic material (≈150 lentil accessions) collected from local and foreign seed banks, representing the parentals of future lentil mixtures or composite cross populations.

Cultivar mixtures’ hight adaptability can increase crop stability in the face of rising environmental variability, their local adaptability can be further refined through collaboration with local actors, as taught by Participatory Breeding approaches.

A crucial step is the definition of appropriate parentals for the target cropping region: for this reason, the first part of the research focuses on their multiplication and evaluation.

**Disclosure of Interest:** None Declared

**Keywords:** Heritage varieties, Legumes, Lentils, Participatory approach, seed breeding collaborative, Varietal mixtures
Topic 2 - Farmers empowerment and autonomy on their farm and on the market

OWC2020-FAR-1126

AN OVERVIEW OF THE DIVERSITY IN MANAGING COLLECTIVELY CULTIVATED BIODIVERSITY: THE EXAMPLE OF FRENCH COMMUNITY SEEDS HOUSES

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1Réseau Semence Paysannes, Aiguillon, 2Réseau Semence Paysannes, Appelle, France

Summary: The RSP supports around 40 cultivated biodiversity renewal organisations, which have been sprouting in France for the past fifteen years. There is no stereotypical model describing everything that a Community Seed House covers.

The diversity of the organization methods is in line with what they develop: the biodiversity in the fields and on our plates thanks to peasant seeds. However, their common ground lies in the need to organise themselves collectively for technical, political or regulatory reasons.

The different aspects of peasant seeds require a workload, a reappropriation of knowledge, and exchanges that can only be done in groups. The « Maisons des Semences Paysannes » thus enable farmers and gardeners to organise this work themselves around the renewal of their seeds and the development of cultivated biodiversity, on all kinds of plants and for very different purposes.

This has led to various organizational modes, of which we present a non-exhaustive overview.

Disclosure of Interest: None Declared

Keywords: collective seeds management, community seed houses, cultivated biodiversity, peasants' network, peasants' seeds
Topic 2 - Farmers empowerment and autonomy on their farm and on the market

OWC2020-FAR-611

: HOW SEED SAVER NETWORK, KENYA CONTRIBUTE TO MITIGATE THE PROBLEMS OF FOOD INSECURITY AND REDUCED FOOD SOVEREIGNTY

DANIEL N. WANJAMA* 1

1CEO, Seed Savers Network, Kenya, Gilgil, Kenya

Summary: Food insecurity and reduced food sovereignty is rampant in Kenya. This can be attributed to new era of industrial agriculture results to genetic erosion of local crops, monoculture, high pricing of seeds and excessive use of chemicals.

As a remedy, Seed Savers Network empowers farming communities through mobilizations, formation farmers seed enterprises, trainings on seed selection, seed banking, seed fairs and festivals, documentation of indigenous knowledge and seeds, recruiting seed champions to train others, creating a multi-stakeholders network of supporters and media campaign and documentation of indigenous varieties and knowledge, promotion of adapted local food crops. Seed savers network has more than 57000 members represented by 2640 groups having grown for the last 10 years for the network existence.

Disclosure of Interest: None Declared

Keywords: agro-diversity, capacity building, community biodiversity register
Session - Getting inspired from biodynamics practices and approaches
**Topic 1 - Organic Farming holistic systems**

OWC2020-FAR-912

**BIO-DYNAMIC AND NATURAL FARMING PRACTICE FOR CULTIVATION OF PADDY RICE**

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**Summary:** Golden snail Apply little fried rice bran and Cassia fistula for controlling. Rice blast, sheath blight and other fungus were applied BD 508 horsetail and BD 501 with good result. Rice Stem borer, yellow stem borer and other insects were managed by Cinnamomum burmannii and turmeric extraction.

All of the above material could get from the author’s farm and neighboring farms. Low cost easy to prepare with good results.

**Disclosure of Interest:** None Declared

**Keywords:** None
Topic 1 - Organic Farming holistic systems

OWC2020-FAR-983

BIODYNAMIC PRINCIPLES AND PRACTICES

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Summary: The deep principles and innovative practices of biodynamic agriculture can be taken up by any farmer or gardener wanting to enhance the health and vitality of their soil and the food they grow. We will explore the unique and practical ways that you can apply biodynamics to grow the most nutrient-dense and vibrant food possible, build soil organic matter, revitalize landscapes, and protect the climate by bringing more carbon into the living realm.

Disclosure of Interest: None Declared

Keywords: biodynamic, climate change, climate resilience, compost, regenerative, soil carbon
**Topic 1 - Organic Farming holistic systems**

OWC2020-FAR-1196

**EVALUACIÓN DE LA CALIDAD DEL VINO EN PRODUCCIÓN ECOLÓGICA Y BIODINÁMICA MEDIANTE EL MÉTODO DE CRISTALITZACIÓN SENSIBLE Y EL PROGRAMA DE TRATAMIENTO DE SUS IMÁGENES**

Montse Nadal¹, Antonio Molina¹ and Vitiviniculture research group
¹Biochemistry, University Rovira i Virgili, Tarragona, Spain

**Summary:** El objetivo de este estudio fue la interpretación de cristalizaciones sensibles y evaluación de la calidad del vino procedente de un viñedo ecológico y biodinámico.

Para ello, se analizaron muestras de hoja y vino según dos métodos; el de cristalizaciones sensibles según el protocolo establecido por Pfeiffer y el análisis estadístico de imágenes de las cristalizaciones realizado mediante un programa informático.

Para referenciar la calidad se determinó la composición química del vino y se relacionó con los anteriores métodos.

El resultado del análisis estadístico de las imágenes en hoja reveló 4 parámetros de textura significativos para diferenciar objetivamente las imágenes de las cristalizaciones; entropía, homogeniedad, contraste i uniformidad. En hoja y vino, los tratamientos el de biodinámica y el de fitoterapia muestran las cristalizaciones y imágenes de textura indicadores de mejor calidad. Así como mayor concentración de fenoles y grado alcohólico.

**Disclosure of Interest:** None Declared

**Keywords:** cristalization sensible, organic viticulture, water stress, wine quality
Session - The farms and the cities: examples of building bridges
HOW DOES URBAN AGRICULTURE WORK AS A KEY TO ORGANIC IN TAIWAN?

Changhung Chiu*1

1product, Ugly but Healthy, New Taipei City, Taiwan

Summary: Urban sprawl nibble at farmland quite common in Taiwan, which leads to conflict in between urbanization and agriculture.

To secure food produce and recreation need, urban agriculture can be a solution.

I rent a piece of land at Ganyuan, New Taipei City, it divided into 143 units (33 square metres each) as a urban farm, and sublet to residents who willing to pay for growing vegetables. The rent goes to landlord is higher than fallow subsidy, which makes more profit.

It strikes a balance between supply and demand of farmland, create cash flow, and bring in landlord and residents to work together.

Disclosure of Interest: None Declared

Keywords: urban agriculture, urban sprawl
**Topic 3 - Farmers commitment in favour of the social dimension of organic farming**

OWC2020-FAR-724

**SHARING THE RISK: INVOLVING CUSTOMERS IN SUPPORT OF YOUR FARM**

Elizabeth Henderson* 1

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**Summary:** After trying many forms of marketing, attracted by the idea of asking customers to share the risks and benefits of an organic farm, my farm made the commitment in 1988 to try Community Supported Agriculture (CSA), a new unfamiliar concept in the US. Over three decades later, customers are still involved.

They have worked on the farm, participated in a core group that helps with administrative tasks, and supported the farm economically.

I will share the many things I have learned from inviting my customers to help me and my partners run a family-scale organic farm where we could make our full living. By growing high quality food, we provided a valued service.

Our CSA members reciprocated, contributing creative ideas we would never have thought as well as generous financial support that enabled a land trust to purchase the land we were renting and lease it back to us. CSA farmers do not ask enough of their customers. A participatory CSA is an exemplary form of solidarity economics.

**Disclosure of Interest:** None Declared

**Keywords:** Community Supported Agriculture, Cooperation, Participation, Solidarity economics
Topic 3 - Farmers commitment in favour of the social dimension of organic farming

OWC2020-FAR-997

A STRATEGY TOWARDS CONTINUITY PROGRAM AND THE INDEPENDENCE OF ORGANIC FARMERS GROUPS IN MOJOKERTO, EAST JAVA, INDONESIA

Slamet Slamet* 1, 1 on behalf of Indonesia Organic Alliance

1Brenjonk, East Java, Indonesia

Summary: The Educational Ecotourism BRENJONK Organic Village was initiated with the aim of guaranteeing farmers' independence through sustainable businesses based on the principle of social entrepreneurship. There are 130 organic farmers involved in this program, 100 women and 30 men with 12 ha of certified organic land.

When it was established in 2007, BRENJONK concentrated on the production and marketing activities of organic agricultural products. However, in 2013, BRENJONK began to conduct campaigns and activities as part of the Organic Village Education and Ecotourism program. The role is to train young farmers with skills to become trainers, facilitators, assistants, and ecotourism guides.

Disclosure of Interest: None Declared
Session - Empowerment of indigenous people through cooperation
**Topic 4 - Advisory services: How to take part in changing the agricultural model**

OWC2020-FAR-933

**XINGU INDIGENOUS TERRITORY - TIX / AN ISLAND OF SOCIOBIODIVERSITY IN THE HEART OF BRAZIL**

TERRITÓRIO INDÍGENA DO XINGU - TIX / UMA ILHA DE SOCIOBIODIVERSIDADE NO CORAÇÃO DO BRASIL

Marcelo S. Martins

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**Summary:** Located in central Brazil the TIX - Xingu Indigenous Territory, the first demarcated indigenous land in Brazil, with a protected area of 2.8 million hectares, in the transition of the Amazon and Cerrado (Brazilian Savana) biomes, where 16 different indigenous peoples live, the main threat comes with the advance of intensive agriculture aimed at the exportation of grains, which brings with it the burning, deforestation, silting of the rivers and contamination by pesticides.

Faced with the threatening scenario, their peoples are organized in defense of their territory and propose alternatives to development that guarantee their cultural and economic survival in a sustainable way and guarantee the biodiversity on which they depend, traditional crops with indigenous varieties, access to organized markets.

In PGS and Seal of Origin, the struggle for rights and actions against deforestation and environmental destruction are the main actions of the peoples of TIX.

**Disclosure of Interest:** None Declared

**Keywords:** empowering local producers, indigenous knowledge, resilience of agroecosystems, sociobiodiversity, threats from grain exporting agriculture
**Topic 3 - How to better share value along supply chains, how to go towards fair organic, how to improve the working conditions?**

OWC2020-SUP-1396

**ALTERNATIVE FARMING SYSTEM AND SOLIDARITY ECONOMY: A CASE STUDY ON PGS PROJECT FOR THE “TRIBAL E-SHOP” IN TAIWAN**

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1Secretary general, Association of Taiwanese Indigenous Peoples’ Development, NANTOU COUNTY, Taiwan

**Summary:** The PGS model of Tribal E-Shop starts from agriculture transformation (organic agriculture) with cross-tribe and cross-ethnic group organization patterns and applies the cultural habits in indigenous society to break through the boundary between individual tribes.

It allows the cooperative production and marketing model becoming local resistance strategy to capitalism and neoliberalism, coping with different ethnic groups and cultural background for detailed adjustment, and then establishing their own models and characteristics and become the organizational basis of pan-indigenous solidarity economy.

Furthermore, the level of indigenous living culture should be integrated into the production and marketing mechanism of modern organic agriculture to tightly connect indigenous alternative agricultural systems, local diet culture revival, and food sovereignty so as to develop the agronomy movement with indigenous traditional knowledge and characteristics.

**Disclosure of Interest:** None Declared

**Keywords:** alternative agricultural systems, indigenous peasant, PGS, solidarity economy
Session - Resilient organic farmers tackling climate change
Topic 4 - Advisory services: How to take part in changing the agricultural model

OWC2020-FAR-1447

SUSTAINING FAMILY-FARM FOR LIVELIHOOD THROUGH SUSTAINABLE AGROECOLOGY IN THE UPLANDS OF SIBALOM, ANTIQUE, PHILIPPINES

Fiona Marty¹ on behalf of Maricel Endencio, Maricel Endencio*²

¹FNAB, Paris, France, ²Bulalacao, Calooy, Tula-tula Sikap Organisation, Sibalom, Philippines

Summary: Philippines is one of the most vulnerable countries when it comes to Climate Change; as a result, severe floods caused by heavy rainfall and typhoons are experienced as well as drought, and extreme weather events. The impact of climate change has worsened the socio-economic problems of the country and has made poor and small farmers more vulnerable.

Sibalom, Antique is near the West Panay fault. In addition to this, the area is vulnerable to typhoons that bring strong winds and events of landslide, and drought. In December 2018 to June 2019, a long drought was experienced due to El Niño which pose major threat to production and in the agricultural sector in general.

MASIPAG farmers’ solution to achieve food security and to immediately recover from the impact of climate change is adaptation grounded on farmers’ resilience, use of farmers’ technology, use of traditional seeds, biodiversity conservation, community seed banking, and social solutions; all in the context of farmer empowerment

Disclosure of Interest: None Declared

Keywords: crop diversity, Family-farm, food security
Topic 4 - Advisory services: How to take part in changing the agricultural model

OWC2020-FAR-1442

BAYANIHAN IN CHANGING CLIMATE

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Summary: The Philippines ranked 3rd in the most climate change vulnerable country affecting millions of people and their livelihood. For farmers, minor changes in the climate patterns pose major concerns to them since the environment is closely tied to farming and their livelihood. With that, appropriate responses to climate change is very important to secure the farmers livelihood. MASIPAG is working closely with organizations to develop and implement programs that help them attain resiliency and mitigation through promotion farm diversity and maximization of resources to get away from negative effects of pesticides and its related costs to the farmers and the environment. Coupled with strong social infrastructure through farmers organizations, their communal work or Bayanihan, biodiversity conservation and improvement, farmer-led approaches to resolve challenges, strengthening capacities from production to marketing, have been instrumental in achieving a more resilient community of farmers in the Philippines

Disclosure of Interest: None Declared

Keywords: None
**Topic 1 - Organic Farming holistic systems**

OWC2020-FAR-1300

**GRANJA PURA VIDA, UN ESTILO DE VIDA**

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**Summary:** La Granja Pura Vida es una propuesta de vida basada en la Agroecología, iniciada en el año 2002 en un terreno de 5.700 m² (0.57 has.) en el municipio de Andalucia, Valle del Cauca, Colombia, con el trabajo conjunto de la familia compuesta por Alfredo e Ismenia (abuelos), Gladys y Alfredo (padres) y Camilo, Pablo, Santiago y Melissa (hijos).

A partir de un terreno deteriorado y sin vegetación, un potrero, se comenzaron a aplicar los principios agroecológicos y con el fin de tener soberanía alimentaria se establecieron mas de 100 especies alimenticias, 40 de ellas frutales, especies forrajeras y luego especies animales como aves de corral, cerdos, cabras, peces que proporcionan el alimento a la familia, unos excedentes para el mercado local y en la actualidad la granja es un espacio de capacitación para estudiantes y campesinos.

**Disclosure of Interest:** None Declared

**Keywords:** Agroecological transition, agroecology, family farming, local foods
Topic 1 - Organic Farming holistic systems

OWC2020-FAR-1255

LA SPIRULINE UNE CULTURE AVANT TOUT FAIBLEMENT CONSOMMATRICE D'EAU

Nathalie De Poix* 1 and AQUACULTURE
:SECRETARIAT, FEDERATION, CLERMONT L'HERAULT, France

Summary : La spiruline est une cyanobactérie : Elle n’est ni une algue (eucaryote), ni marine (elle se développe principalement dans des lacs volcaniques présentant une forte alcalinité). Or la Commission Européenne l’a classée en 2017 lors du remaniement du règlement bio en "Algues Marines" ce qui oblige les producteurs à utiliser des intrants d’origine végétale peu solubles, qui sont plus salissants pour les milieux en cultures que les intrants minéraux employés en culture conventionnelle.

Ces intrants obligent à renouveler l’eau des bassins plus fréquemment, ce qui accroît fortement la consommation d’eau. La culture peut alors être qualifiée de biologique mais n’est plus du tout écologique.

Disclosure of Interest: None Declared

Keywords: EAU ECOLOGIQUE PROTEINE ALIMENT COMPATIBLE AVEC BIOLOGIQUE
**Topic 1 - Experiences and innovations for a continuous improvement in reducing the environmental impacts of the production processes**

OWC2020-SUP-878

**SNOW HARVEST POND IRRIGATION - CLIMATE SMART PRODUCTION**

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1Programme Management, Surya Social Service Society, Jumla, Nepal

**Summary:** Jumla, the first organic district of Nepal is the leading for apple growing in terms of production and area coverage. Apple farming has been adopted by about 16000 household with 5500 Mt production. Although the production is increasing every year, the quality is not improved as per market demand. The apples are being cultivated in sloppy terrain where there are no sources to irrigate apple trees.

Moreover, the existing sources are being depleted every year due to climate change. Since irrigation is one of the critical factors for quality improvement, a concept was developed in coordination with Agriculture Development Office to conduct an action research to collect snow via construction of pond.

Experiences of water harvesting in pond in mid hills of Nepal guided us to conduct the action research on snow harvest irrigation system. This was conducted in various orchard. The outcomes successfully contributed pilot and demonstrate the model orchard using the available low cost technology that increase and maintain soil moisture thus leading to better apple production reducing the vulnerability to the climate issues.

**Disclosure of Interest:** None Declared

**Keywords:** Apple value chain development, Climate adaptation practices for quality production, Climate smart agriculture, innovation
Session - Organic farming advisory and training
Topic 4 - Advisory services: How to take part in changing the agricultural model

OWC2020-FAR-684

INTERNATIONAL PEER-REVIEW QUALITY SYSTEM FOR BIODYNAMIC ADVISORS

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Summary: The interest in biodynamic agriculture and Demeter products is growing worldwide. In order to meet the demand for reliable and qualified advisors on a national and international level, the Section for Agriculture, Demeter International and a group of biodyn. advisors, have developed a peer review quality system for biodynamic advisors in a participatory process, which combines the needs of all the stakeholders.

The creation of a portfolio fosters the evaluation and therefore enhances the overcoming of gaps in knowledge and the individual development. A peer review quality development meeting at the start and every three years guarantees and further develops the quality of the biodyn. advisory service, ensuring trust and transparency.

This kind of inclusive quality assurance and development shows the appreciation of diversity as well as the demand for qualitative, self-responsible advisory service in biodynamics, as supported by the Section for Agriculture and Demeter International.

Disclosure of Interest: None Declared

Keywords: Advisory, Biodynamic farming, Demeter, Participatory Guarantee Systems, peer-review
Topic 4 - Advisory services: How to take part in changing the agricultural model

OWC2020-FAR-581

SCHEMES FOR ORGANIC TECHNICAL ASSISTANCE

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Summary: This session will offer an assessment of a variety of initiatives for organic production technical assistance. It will evaluate and discuss two specific technical assistance investments: USDA-NRCS “Contribution Agreements,” and the Organic Agronomy Training Service (OATS) Project. A short overview of other current and historical organic extension/education models will be provided.

The session will examine best practices for defining, measuring and evaluating results for any given technical assistance model. We will conclude by framing the strategic questions that must be answered for future investments in technical assistance.

Disclosure of Interest: None Declared

Keywords: Technical Assistance, Extension, Farmers, Training, Agronomy, GRO Organic
Session - Women as key actors in organic farming
Topic 3 - Farmers commitment in favour of the social dimension of organic farming

OWC2020-FAR-1252

MUJERES DEL ORGÁNICOS SUR DE MINAS GERAIS SE ORGANIZAN Y LUCHAN POR EL RECONOCIMIENTO Y EL APRECIO

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1Orgânicos Sul de Minas, Pedralva, Brazil

Summary: Orgánico Sur de Minas, que opera con su SGP en la región sur de Minas Gerais en Brasil, busca dar la bienvenida, apreciar y reconocer a las mujeres agricultoras en nuestro territorio. La formación de un grupo de mujeres agricultoras está ayudando en el desarrollo de espacios y actividades que dan visibilidad al trabajo desarrollado por las agricultoras. Juntas, las agricultoras se están reconociendo y hablando sobre cómo superar las dificultades que enfrentan en el campo.

Las mujeres agricultoras se han organizado y participado durante los últimos 4 años en diversas reuniones y actividades que buscan crear mecanismos prácticos para reconocer el trabajo realizado en el campo y en el proceso de certificación participativa.

Los resultados son visibles y muestran que las mujeres están presentes en todas las etapas del proceso de producción, desde el cultivo hasta la comercialización, así como la certificación.

Disclosure of Interest: None Declared

Keywords: Agroecología, mujeres, PGS, reconocimiento
**Topic 3 - Farmers commitment in favour of the social dimension of organic farming**

OWC2020-FAR-1319

TRANSFORMACIONES DE LAS PRACTICAS HEGEMONICAS DEL PATRIARCAMO ATRAVEZ DEL FEMINISMO COMUNITARIO EM LA CONSTRUCCION DE LA SOBERANIA ALIMENTAR.

Neltume Espinoza* 1

1AOPA, Colombo, Brazil

Summary: Este trabajo, analiza y vincula la relación entre la soberanía Alimentar y la soberanía de las Mujeres. Por medio de un registro reflexivo de un colectivo de mujeres campesinas que asume la dirección de (AOPA) Asociación para el desenvolvimiento de la Agroecología, de más de 20 años de existencia, donde por primera vez la coordinación o dirección de la asociación es absolutamente representada por mujeres.

Observando el Feminismo Comunitario como inspiración e base teórica que puede ser desenvolvía y a profundada dentro de los espacios que desarrollan la Agroecología.

Inicialmente observamos nuestra inserción como dirección, e como agricultoras a modo de autoevaluación, como Mujeres Campesinas dentro de espacios ya consolidados de la Agroecología, así nos situamos en las realidades de la (SPg) Red ECOVIDA de Agroecología y en la Asociación para el desenvolvimiento de la Agroecología AOPA.

Dentro de estas organizaciones sociales hemos problematizado la necesidad de crear movimientos trascendentes dentro de nuestros espacios de construcción, haciendo una autocrítica a las dinámicas o mecanismos de funcionamiento, que muchas veces reproducen la cultura Patriarcal e colonizadora, desafiándonos a nuevas formas de relaciones, que buscan una desconstrucción de lo impuesto o establecido, de modo de fortalecer la soberanía de las Mujeres que construyen la soberanía Alimentaria.

En esta construcción me manifiesto como campesina del territorio Latino Americano, observando y vivenciando diversas injusticias que ultrapan los territorios. Me sumo a la busqueda de nuevas formas, nuevas relaciones, dentro de las sociedades y de los movimientos sociales, buscando un entendimiento y comprensión de los ciclos de la vida, de la expresión de la Madre Tierra, para realmente sumarme a las manifestaciones energéticas que generan vida.

Disclosure of Interest: None Declared

Keywords: Agroecología, Feminismo, Patriarcado, Seguridad Alimentaria.
Session - Access to land: a starting point for organic farmers
Topic 2 - Farmers empowerment and autonomy on their farm and on the market

OWC2020-FAR-1332

ACCÈS À L'INSTALLATION VIA L'ÉPARGNE CITOYENNE :
PLACER SON ARGENT DANS UNE FERME BIO PLUTÔT QUE DANS UNE BANQUE.

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Summary: Au Nord Ouest de la Bretagne, 5 jeunes se sont installés sur une exploitation laitière de 60 ha, déjà certifiée en agriculture biologique. Ils démarrent une production laitière grâce à 30 vaches et 40 chèvres, avec transformation à la ferme dans le but de vendre localement en direct à la population.

Reprenant une exploitation laitière de taille moyenne, ils se trouvent confrontés à la reprise d’actifs immobiliers importants. Le rachat de ce capital devient vite antagoniste avec la volonté d’intensifier le travail sur la ferme, en passant de cinq unités de main d’œuvre là où il n’y en avait que deux auparavant.

Ils font alors racheter la partie immobilière de l’exploitation agricole par de l’épargne citoyenne et deviennent ainsi locataires d’un collège de 300 propriétaires.

En fléchant ainsi leur épargne les citoyens créent 5 emplois, se facilitent l’accès à des produits bio locaux, préservent leur environnement et enfin sortent définitivement une ferme du marché de l’immobilier.

Disclosure of Interest: None Declared

Keywords: engagement citoyen, Foncier, installation paysanne
**Summary:** Farmers are a greying population. In the next two decades, millions of hectares will change hands. What happens to that land when it reaches the market is crucial to the future of our food system, and current trends point in the wrong direction.

In this crucial moment of land transition, a new generation of farmers has emerged. The demand for organic food is strong and growing, and with a changing climate, the urgency for restoration, ecological stewardship, and conservation is becoming more evident. Yet the majority of young farmers and beginning farmers of all ages struggle with land access, affordability, and tenure.

Grassroots innovations have emerged to support a new generation of farmers access land: community land trusts, cooperatives, public-commons coacquisition, etc. They chart the way forward to secure land to renew farmers’ generations and enable a transition towards organic farming and agroecological food systems.

**Disclosure of Interest:** None Declared

**Keywords:** land use; access to land; new entrants; generation renewal; agroecological transition
Summary: La Ferme de l'Envol, imaginée par notre association Fermes d'Avenir avec 5 porteurs de projets, maraîchers bio, et sept partenaires fondateurs, cherche à prouver, par l'exemple, la viabilité et la rentabilité d'un nouveau type de ferme résiliente inspirée de la permaculture pour donner un modèle reproductible en matière d'autonomie alimentaire et de création d'emplois sur les territoires.

La ferme de l'Envol, située près de Paris en Essonne, sera évidemment un espace de production agricole, mais également un lieu d'accueil du public, un espace de formation et une plateforme pour les associations locales.

Le fonctionnement de la ferme repose sur une société de développement (SCIC) co-gérée avec les collectivités, les acteurs économiques et associatifs ainsi que les citoyens, mais aussi sur une société de production (SCOP), ce qui permet notamment de revaloriser le statut d'agriculteur et garantir un salaire juste et des protections sociales de qualité.

Disclosure of Interest: None Declared

Keywords: agroecology, Autonomie alimentaire des territoires, Cooperative, local authorities, territoire, Training
Session - Organic poultry management


**Topic 1 - Organic Farming holistic systems**

OWC2020-FAR-986

**LIVESTOCK MANAGEMENT (ORGANIC BROILERS AND DISEASE CONTROL)**

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**Summary:** In recent times, research has linked broilers raised with growth hormones, antibiotics, vaccines and other synthetic drugs with several health problems in humans, they contain harmful chemicals because of their artificial state. Apart from several illnesses resulted from antibiotic raised chicken, antibiotic resistance has been generally reported from medical field across many countries.

So, we resulted to rearing chicken without vaccination, growth hormones, antibiotics and synthetic drugs using spices, herbs and fruits we used for prevention and treatment of diseases.

Organic ingredients needed includes, Bitter leaves (Vernonia Amygdalina), Pawpaw i.e. papaya, Molasses, Neem plant (Azadirachta Indica), Scent Leaves (Basil), Ginger, Garlic, Turmeric, Christmas melon, Okra seed, Pumpkin seed, Pumpkin leaves, Moringa leaves, Gongtonema Latifolium, Lactic Acid Bacteria Culture (LAB), Tomato fruit, Lime citric fruit, Banana, Cucumber, Apple, Pineapple, Orange peel, Cardamom, etc.

**Disclosure of Interest:** None Declared

**Keywords:** None
**Topic 2 - Farmers empowerment and autonomy on their farm and on the market**

OWC2020-FAR-1079

**RATION PLANNING TOOLS FOR PIGS AND POULTRY IN ORGANIC FARMING**

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**Summary:** The ration planning for pigs and poultry in organic farming differs from conventional feeding. The available ration planners are therefore only suitable for organic farming to a limited extent. Till September 2020 ration planning tools will be created, enabling farmers to calculate their own feed rations for pigs, broilers and laying hens, adapted to organic farming conditions. The ration planning tools will take account of different nutritional needs, nutritional value of organic raw material and take account of of pasturing and roughage.

A database of mainly organic feedstuff will be the basis for the tool. The ration planning tools will be made Excel based on French and Swiss feeding systems. On organic farms, roughage could be used to feed pigs and poultry.

Farmers are to be enabled to calculate their own rations. At the beginning of 2020 the ration planner will be created and tested on farms. A first version of the Excel application can be presented at the OWC.

**Disclosure of Interest:** None Declared

**Keywords:** broiler, feed, pigs, ration planning
FEASIBILITY OF AN 100 % ORGANIC FEED FOR LAYING HENS

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Summary: Organic Poultry farms are subject to regulations (EC) 834/2007 and (EC) 889/2008. A derogation, ending on December 31st 2020, still allows introducing up to 5 % of conventional vegetable raw materials into the feed of organic laying hens. The objectives of our project were to propose a feed for laying hens, 100 % organic, technically and economically competitive and with regard to animal welfare.

Two feed strategies were thus tested, one 95 % organic, representative of current practice (Blank) and one 100 % organic with feed (Test). Over the rearing period, the average rates of lay were similar for both feeding strategies. The middleweight of eggs was between 56 and 57 g whatever is the food strategy.

Our 100 % organic feed, formulated to best meet the needs of laying hens, allowed to maintain egg quality. However, the 100% AB feed remains more expensive than the 95% AB feed with a price increase of 1.5% for the early egg laying feed and 0.4% for the mid-layer feed.

Disclosure of Interest: None Declared

Keywords: Egg quality, feed, laying hens, welfare
Session - Organic farming preserves the soil
COMMENT CONCILIER LA CONSERVATION DES SOLS ET L’AGRICULTURE BIOLOGIQUE

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Summary: Comment concilier agriculture de conservation des sols (dans le sens limiter le travail du sol pour éviter de bruler de la matière organique et développer la couverture végétale tout au long de l’année) et agriculture biologique?

Voici la question à laquelle un polyculteur-éleveur de Seine-Maritime tente de répondre. Il cherche à maintenir un couvert de légumineuses lors de l’implantation d’une grande culture en le contrôlant par des fauches régulières de l’inter-rang. La biomasse de l’inter-rang servira à la fertilisation de la culture.

Disclosure of Interest: None Declared

Keywords: conservation des sols, luzerne, priming effect, Trèfles
Topic 1 - Organic Farming holistic systems

OWC2020-FAR-547

YIELD INCREASES AND CLIMATE PROTECTION THROUGH BIOCYCLIC HUMUS SOIL POTENTIALS AND INNOVATIVE APPROACHES OF A CYCLE-BASED, VEGAN FORM OF ORGANIC AGRICULTURE

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Summary: Agriculture – owing to the use of mineral fertilizers, as well as to intensive livestock farming and the application of livestock manure (solid and liquid) – can be considered as one of the principal causes of greenhouse gas emissions. However, it is also evident that consumption of animal products has to be decreased globally to be able to support a growing population at a sustainable means, especially with regards to greenhouse gas emissions. Thus, any organic farming approach which is not based on the combination of plant production and animal livestock is to be welcomed.

BNS Biocyclic Network Services will share its experience in working with fruits and vegetable producers in Greece and Cyprus adopting a cycle-based vegan form of agriculture (Biocyclic Vegan Standard). Sustainable improvement of soil fertility is guaranteed by using purely plant-based organic material, in particular biocyclic humus soil. Emphasis will be given on the preparation of compost and biocyclic humus soil.

Disclosure of Interest: None Declared

Keywords: Biocyclic Humus Soil, Biocyclic Vegan Standard, Climate Change, Plant-Based Compost
Topic 1 - Organic Farming holistic systems

OWC2020-FAR-809

SMALL SCALE ORGANIC FARMING PRACTICES IN GHANA WEST AFRICA
BY NANA KWAW ADAMS FARMER AND AGRO-ECOLOGY TRAINER

Adams N. Kwaw *1

1 NGO, Abrono Organic Farming Project (ABOFAP), Techiman, Ghana

Summary: • Organic Agriculture has recently gain attention of decision makers and general public for achieving more economic and viable yields and also for high quality safe food and environmental protection. • In Ghana, several stakeholders have worked round the clock to promote and strengthen organic agriculture development. It has however been realized that these efforts have not been well coordinated and absence of a common platform has hampered the development of the sector. Abrono Organic Farming Project (ABOFAP) a farmer based organization with a membership of 6000 small scale farmers has taken the initiative to train the youth and women in organic food production in Ghana.

Disclosure of Interest: None Declared
Session - Farmers autonomy on the farm and on the market
**Topic 2 - Farmers empowerment and autonomy on their farm and on the market**

**EMPOWERING FARMERS WITH AUTONOMY BY PROMOTING ORGANIC FARMING, ASSURING MARKET ACCESSES**

Victor M. B. A. Priynatha* † on behalf of Minimandala farmer group

†Mihiamdala Organic farmer Society, Badulla, Sri Lanka

**Summary:** Sri Lanka is tropical Island in the Indian Ocean. It has over 2500 years written history and total land area is 65 610 sq.km with 20.3 Million population.

Presently farmers who cultivate exotic vegetable cultivation use heavy amount of agrochemicals especially in Uva highland. Farmers who practiced exotic vegetable cultivation with agrochemical in Uva highland of Sri Lanka highly depending on sourcing inputs, investment for their farming activities and marketing of their agricultural products.

Mihimandala Organic Farmer Society (MOFS) was formed among farmers who adopted to organic vegetable cultivation to promote cultivation, processing and marketing of organic vegetable cultivation among small scale famers.

Members of MOFS empowered with self-autonomy by 100% assuring marketing organic products produced by themselves removing depending outside sources (specially sourcing organic manure and biological pesticide) and providing required technical assistants.

**Disclosure of Interest:** None Declared

**Keywords:** Organic farmers Empowerment, Market access, Direct Marketing
Summary: The objective for setting up the shop is to make organic produce available to everyone and this is why we opened the farm shop and how we did it. We had no strong market for our produce and even when we produced, transporting them to the selling point was tough.

Our initial sales were at exhibitions, to family and friends who either believed in what I was doing or were supportive. The rest of our produce we sold on the street of a local market.

With more families showing interest in our produce we started supplying and delivering to homes. Then a persistent and strong clamour for see, feel and buy, for our produce made us open a store at the Mall.

How did the shop happen?

We conducted a simple survey by interviewing our customers and others. From this, we realised that: people wanted direct access to farm fresh produce, they wanted to know the source of their foods.

Opening the store increased our creativity to process some of our produce.

Disclosure of Interest: None Declared

Keywords: FARM SHOP
Summary: L’autonomie est à la fois la capacité d’être maître de ses choix et la possibilité
d’exercer cette capacité. Ce principe est au cœur de l’agroécologie paysanne et renvoie
notamment aux choix des modes de production et de commercialisation, des outils de
production et des intrants.

A rebours du réglementaire et normatif dominant adapté à l’agriculture industrielle
standardisée et fortement mécanisée, des fermes s’emparent de la question technique et font
de la souveraineté technologique un vecteur de l’autonomie paysanne.

Christophe Jouault, maraicher sociétaire de l’Atelier Paysan, témoignera de son engagement
en ce sens sur sa ferme.

Disclosure of Interest: None Declared

Keywords: agroécologie paysanne, autoconstruction, autonomie paysanne, innovation par
les usages, Souveraineté technologique, technologies appropriées
**Topic 2 - Farmers empowerment and autonomy on their farm and on the market**

OWC2020-FAR-1268

**AUTONOMIE PAYSANNE**

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**Summary:** L’autonomie correspond ici, à la capacité et le plein exercice de son libre arbitre dans ses choix agricoles. Ce principe, au fondement de l’agroécologie paysanne, est en lien avec des modes de production, de transformation et de commercialisation adéquats. Face à l’agriculture industrielle, des fermes innovent grâce à l’autonomie paysanne, avec au cœur de leur démarche la volonté d’une souveraineté alimentaire et culturelle.

Le témoignage de Nicolas Supiot, Paysan-boulanger breton depuis 25 ans, donnera une illustration de ces récupérations de savoir-faire, appropriations et co-constructions de compétences nouvelles, adaptées et pertinentes pour sa ferme.

**Disclosure of Interest:** None Declared

**Keywords:** agroécologie paysanne, Paysan-boulanger, semences paysannes, Souveraineté alimentaire et culturelle, Système de Garantie Participatif, Vente directe