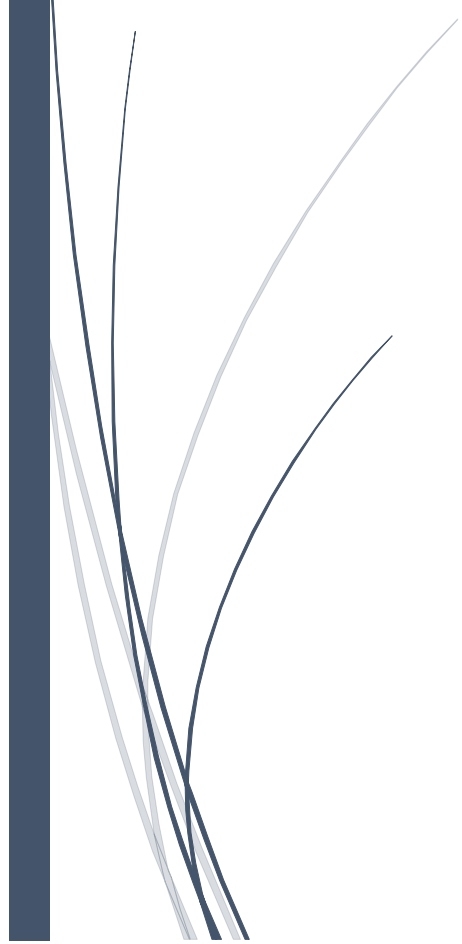


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Descriptive metadata



Analysis of the Effects of the Oil Industry on family farm labor in rural areas in the municipality of Puerto Gaitan, Meta in Colombia

Type	Poster
Author	Jairo Hernán González Aguilera
Place	Maringa (Brazil)
Pages	3
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	Social and economic effects of the implementation of development projects, such as hydrocarbons, generated in rural areas structural changes in values and economic behavior of communities that are part of them.

Labor conditions and family succession in dairy productions systems in Paraná State, Brazil

Type	Conference Paper
Author	Ferenc Istvan Bánkuti
Author	Júlio César Damasceno
Author	Sandra Mara Schiavi Bánkuti
Author	Kellen Cristina Kuwaraha
Author	Rodrigo César Prizon
Place	Maringa (Brazil)
Pages	7
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract Brazil is an important player in the world's agricultural and livestock scenario. Brazil is the fourth largest milk producer in the world, and besides its economic relevance, milk production in Brazil has an important social function. Among the Brazilian states, Paraná is the third largest milk producer, accounting for 12.9% of national production. Despite its social and economic importance, some drawbacks remain in dairy activity, demanding deeper investigation. Among these problems, one can highlight inappropriate labor conditions and problems for family succession. Labor conditions may be critical for successors to decide whether to remain in the dairy activity. Thus, this paper aims to analyze labor conditions in Paraná's dairy activity. The method comprised face-to-face interviews with 153 dairy farmers in four different regions in Paraná. Farmers were grouped according to labor characteristics: group 1 (G1) comprised dairy production systems (DPS) using exclusively family member workers, and included 117 DPS; group 2 (G2) included DPS employing hired labor as well, a total of 36. Using Common Factor Analysis (CFA), nine variables formed three factors, namely "structure" (F1), "labor conditions" (F2) and "family succession" (F3). Results indicate that DPS in the two groups are different mainly in structural aspects, this factor explaining 40% of total cumulative variance. Farmers in G1 produce on a smaller scale, when compared to those in G2. Moreover, DPS in G2 provide better labor conditions when compared to G1. On the other hand, dairy farmers in G2 are less satisfied with the dairy activity and less prone to family succession. Dairy farmers in G1, although smaller and declaring worse labor conditions, are more prone to family succession. It seems that dairy farmers in G1 have other incentives to remain in the dairy activity, which motivates family succession. Results indicate the need to improve labor conditions and create mechanisms to incentivize farmers to remain in the dairy activity.

Management and work in Crop-livestock-tree integration System in Roraima, Brazilian Amazonia

Type	Conference Paper
Author	Amaury Bendahan
Author	René Pocard-Chapuis
Author	Roberto Medeiros
Author	Newton Costa
Author	Ramayana Braga
Author	Jean-François Tourrand
Place	Maringa (Brazil)
Pages	9
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract The increasing population in the Brazilian Amazonia, especially in urban areas, has led to an increasing local demand for food, including meat (Tourrand et al. 2006; Bendahan et al. 2013). High rates of forage production, due to good weather conditions in terms of rainfall and temperature, added to the security and flexibility of cattle ranching are contributing to the rapid expansion of livestock farming in the Amazonia (Veiga et al. 2004). Hence, cattle breeding is considered as one of the main drivers of Amazonia deforestation (Tourrand et al. 2006). More recently, the environmental impact of the associated greenhouse gas emissions have also been highlighted (MAPA and MDA 2011). In the early 21st century, restrictive and repressive measures were enacted in Brazilian Amazonia to reduce deforestation (MMA 2013) and consequently the expansion of livestock farming. An alternative approach supported by EMBRAPA has been focused on sustainable farming systems such as “cropcattle-tree integration systems”, locally called “Sistema de Integração Lavoura – Pecuária – Floresta” (or SILPF). However, the expansion of SILPF at a large scale is difficult, and the integration is often more an association rather than real integration, at least regarding the tree component (Bendahan, 2015). The Roraima is a Brazilian State in the Northern Amazonia, at the border of Venezuela and Guyana. Roraima State has also invested in SILPF research as an alternative to pure cattle ranching in forest and savanna biomes. In 2008, the first SILPF were tested at the Experimental Research Station of Embrapa Roraima. Then others were implanted. Our two research hypotheses are: i) SILPF offers better economic and financial results than cattle ranching, especially due to efficient use of resources, and ii) the capacity to manage multi-component and multi-product systems such as SILPF is a constraint to its implementation.

Increasing income in the agricultural sector: an empirical analysis about the determinants of productivity

Type	Poster
Author	Luan Vinicius Bernardelli
Author	Eliane Cristina de Araujo
Place	Maringa (Brazil)
Pages	3
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract Determining the factors that increase productivity has been one of the main problems of scientific study along with investigations attributing periods of economic recession to periods of productivity decline. However, this introduces the hypothesis of mutual impact: as decreased productivity can lead to macroeconomic instability; so, macroeconomic instability can be a determining factor in the decline of agricultural productivity. The aim of the current study was to conduct an empirical analysis of Brazil covering the period from 1974 to 2013, to determine whether the macroeconomic scenario significantly influences agricultural productivity.

Social representation of work from the perspective of sugar cane cut workers

Type	Conference Paper
Author	Luana Furtado Vilas Boas
Author	Elisa Yoshie Ichikawa
Place	Maringa (Brazil)
Pages	9
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

The development and change of labor relations have allowed growth and diversity in relation to its forms. Thus, precarious work has increased considerably. Given the above, this study aimed to analyze the social representation of work from the perspective of cane cutters. A qualitative approach was used in this research. For this purpose, interviews were conducted with four workers in this sector and discourse analysis was adopted to analyze the data collected. Finally, it was concluded that for these subjects, work is seen primarily as an artifice of survival, followed by the need to have dignity in society, being treated as a mechanism for obtaining achievements and personal accomplishments and last seen as an obligation and suffering.

Determining factors for technological incorporation in dairy production systems

Type	Poster
Author	Anselmo Bodenmüller Filho
Author	Julio Cesar Damasceno
Author	Ferenc Istvan Bánkuti
Author	Carlos Eduardo Crispim de Oliveira Ramos
Place	Maringa (Brazil)
Pages	3
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	<p>This study was conducted in order to analyze the decision-making profiles in family-based dairy production systems (DPS), focusing on the dynamics of information flows, social interactions, biographical features and administrative management. It was possible to improve understanding of the mechanisms of dissemination of knowledge triggered to transfer technology, along with the socioeconomic links, biographical attributes and internal management.</p>

Management of forage area: indicative for maneuver margin and flexibility in dairy production systems

Type	Poster
Author	Anselmo Bodenmüller Filho
Author	Julio Cesar Damasceno
Author	Ferenc Istvan Bánkuti
Author	Carlos Eduardo de Oliveira Crispim Ramos
Place	Maringa (Brazil)
Pages	3
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	<p>The objective of this work is to show the profiles in scale dairy production systems (DPS) from the areas planted with grasses and their respective proportions and relations, together with indications of productive results. This perception contributes to improving the technical advice that has an impact on regional agricultural development. Clusters depict the dynamic management of forage resources and mark the diversity of objectives of the managers, setting up various logical scalings to meet demand.</p>

Changes and continuities in farming work. The case of small and medium grape producers in Mendoza, Argentina

Type	Conference Paper
Author	María Brignardello
Place	Maringa (Brazil)
Pages	10
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

Questioning the production processes in agriculture today directly involves redefining the work and, therefore, the social agents that occupy these workplaces. So, this article is placed within agricultural studies that seek to understand how worldwide integration is transforming the organization of agro-food systems and in what ways these global forces are mediated then translated in the local field. Specifically, since the late 1980s, there have been significant changes in a specific segment of the current wine production in Mendoza. This quality production sector is focused on the development of differentiated products, characterized by the growth of exports, while maintaining the demands of the domestic market. As this model takes hold, it is evident that the definition of quality, both in grapes and wine, is not set in stone. Instead, this designation covers various ideas and practices regarding agricultural work. In this scenario, the small and medium production that manages to go through restructuring processes and is linked to the quality production schemes, should adapt to conceptions and agro-industrial linkages, as well as the required production practices. In some cases, they already had structural elements, such as the varietal-structure that benefited its share in this segment, whereas in others they even had to modify these issues. Now what happens to agricultural work in the vineyard? Who carries out the new tasks that have been incorporated, and also the traditional ones? How are these different tasks remunerated? These questions are answered from a qualitative analysis of interviews that were made to small and medium producers located in the areas of Maipú and Luján de Cuyo, Mendoza, which produce under quality schemes. Through this methodology, we try to understand the current forms of recourse to labor in an agricultural production crossed by global changes, but also by local history and work configurations. As a result, we find that the links established in the work space between the producer, family and nonfamily workers are not channeled in only one direction, nor set once and for all. Instead, we find great diversity and dynamics in the forms of work organization in small and medium grape producers.

Family work in oil palm cultivation in Santa Maria, ToméAçu/Pará

Type	Conference Paper
Author	Márcia Coutinho Caetano
Author	Dalva Maria da Mota
Place	Maringa (Brazil)
Pages	6
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract The aim of this article is to analyze new information on family work within the context of incentives for oil palm production specialization. A study was conducted in a district in the municipality of Tomé-Açu, one of the centers of oil palm production in the State of Pará (PA). Different forms of agriculture (family and agribusinesses) and work relations are practiced in this municipality which is known in Pará for its production of fruit, black pepper and oil palm within the scope of the Program for the Sustainable Production of Oil Palm since 2010. Oil palm is a monoculture produced by agribusinesses or by integrated family farms (contract agriculture). The aim of this article is to analyze the working arrangements of family-farmers cultivating oil palms through integration contracts signed with the company.

Taking into account the meaning, the organization and the productivity of work to better advise farmers

Type	Conference Paper
Author	Sophie Chauvat
Author	G�rard Servi�re
Author	Sylvie Cournut
Place	Maringa (Brazil)
Pages	10
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract The way farming is being carried out is evolving as a result of the pressures of market competition and sociological changes in the rural world (Hervieu and Purseigle, 2013). Work in livestock farming is a multifaceted subject (Kling-Eveillard et al., 2012), a factor of economic production, a succession of tasks and projects to be organized and an activity which constructs its own personal and professional identity. These three dimensions have to be taken into account together to understand the complexity of the work situations of livestock breeders and contribute to their improvement. The object of this paper is to give an account of the results of a research/development project which concentrated on this objective, basing the study on a system being implemented in France and Northern Europe.

Supporting farmers' management of change towards agroecological practices by focusing on the work dimension: the contribution of ergonomics

Type	Conference Paper
Author	Marie Chizallet
Author	Flore Barcellini
Author	Lorène Prost
Author	Marianne Cerf
Place	Maringa (Brazil)
Pages	11
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	<p>The public authorities and some agricultural actors wish to develop agroecology to face the rise of new challenges (impacts of agricultural practices on natural resources in particular). Thus new agricultural work systems are being designed, raising questions regarding the inclusion of farmers' work in the agro-ecological transition. Our action research endeavours to support the development of agricultural work systems by conceiving the agro-ecological transition as a set of processes of collective design of new work systems. To do so, we are implementing a "Building a chronicle of change" method, which appears to be an interesting way to initiate an "Enabling intervention in the management of change" with farmers engaged in different types of changes.</p>

Analysing the impact of use of mobile phones in enhancing demand and access to market information and services for pastoralist communities: Preliminary Insights from Isiolo County, Kenya

Type	Conference Paper
Author	Khalai, Duncan Collins
Author	Banerjee Rupsha
Author	Andrew Mude
Place	Maringa (Brazil)
Pages	6
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

The International Livestock Research Institute (ILRI) is implementing Index Based Livestock Insurance (IBLI) in the Arid and the Semi-Arid Lands (ASALs) of Northern Kenya and Southern Ethiopia as a drought coping mechanism designed to help pastoralists deal with severe drought situations. IBLI makes indemnity payments to pastoralists based on realizations of an underlying index – on an objectively measured random variable – relative to a pre – specified threshold. The payouts ensure that the animals are kept alive during severe drought periods. IBLI’s commercial partners operate on a three tier agency structure for sales and distribution of the product. One of the features of this structure is the third tier of agents which is composed of community shop-keepers (agents) who are trained and provided with smart-phones to perform IBLI sales transactions. The provision of reliable information on prices, diseases, financial services, conflict, and forage, can make a significant difference in market participation, not only for producers but also small-scale livestock traders. With accurate, reliable and timely information, producers and small scale traders are able to make better decisions. A scoping study was carried out in Isiolo County to understand the characteristics of the agents, their willingness to take up additional services and their capacity to use ICT based platforms. A total of 12 key informant interviews were done with 6 IBLI agents and 6 representatives of Government and Non-governmental agencies. Four focus group discussions were done for groups composed of 15 community members each. The FGD participants were selected based on gender i.e. Male and female who had purchased IBLI in the past and those who had not. Structured questionnaires were used in collection of data. Preliminary results showed that there is a demand for a robust ICT based system which is both cost-effective, sustainable and provides near real time, accurate data. Further, findings from interaction with the agents show that in order for them to be the service providers for any kind of ICT based platform, there needs to be a tangible recruitment criterion, continuous capacity building and a strong incentive structure.

Agroecological transition: the work of farmers, advisers, teachers and researchers in question

Type	Conference Paper
Author	Xavier Coquil
Author	Marianne Cerf
Author	Caroline Auricoste
Author	Alexandre Joannon
Author	Flore Barcellini
Author	Patrick Cayre
Author	Marie Chizallet
Author	Benoît Dedieu
Author	Nathalie Hostiou
Author	Florence Hellec
Author	Jean-Marie Lusson
Author	Paul Olry
Author	Bernard Omon
Place	Maringa (Brazil)
Pages	12
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	<p>The French Ministry of Agriculture has called for an agroecological transition that reconciles farming and environment-friendly approaches. This is perceived as an injunction to change, deemed too minimalist by advocates of agroecology and too supportive of environmental concerns by advocates of conventional and industrial farming. Despite a degree of self-prescription, farmers are not the only ones defining the content, the organization and the aim of their work: agricultural training, agricultural development, discussions between peers, research, and regulations all contribute to its definition. Drawing on available research, we study the transformations of the work of farmers and of AKIS actors at play during the agroecological transition. Our argument revolves around the importance, in the agroecological transition, of taking into account: (i) local particularities (situated ecological processes, micro-climates, etc.) and farmers' singularities (relations to nature), including how AKIS actors' forms of organization and intervention are challenged by these particularities; (ii) the role of AKIS actors in supporting the agroecological transition: how can farmers' own discovery of their natural and technical environment from new perspectives be facilitated? AKIS actors can be instrumental in this respect; their interventions then become part of the flow of the farmer's activities; (iii) transformations of work, in various respects relating to systemic representations of the activity: the "doing", the knowledge applied, and the values and norms to which subjects refer are changed; and (iv) the production of agronomic knowledge and the ways in which it is disseminated are challenged.</p>

The prescriptive relationship of science and development towards farmers is likewise challenged. This review raises many questions which we put on the research agenda: does the agroecological transition contribute to reorienting the development of farmers' activity? Is the agroecological transition conducive to the development of sustainable farm work? What transformations of AKIS actors' work are needed to better support the agroecological transition?

Work organization in livestock farms: experiences from the use of the work assessment method

Type	Conference Paper
Author	Sylvie Cournut
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Author	Nathalie Hostiou
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Author	Benoit Dedieu
Place	Maringa (Brazil)
Pages	12
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Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

For more than 20 years, French animal scientists studying livestock farming systems have been interested in the question of work organization in livestock farms and they developed the Work Assessment method to characterize and assess it. Widely used since then in France, and in other countries too, this method quantifies work related to the management of herds and land areas, and evaluates the farmer's room for maneuver in terms of time to carry out other activities on the farm and to have free time. The purpose of this paper is to show the interest of the Work Assessment method, illustrating with examples from the application of the method in 6 countries in the North and South (France, Belgium, Vietnam, Morocco, Uruguay and Brazil), how it characterizes and assesses work organization; how it identifies the main determinants of organization, produces references in working times by major types of production system and provides analyses for the advice and guidance of livestock farmers. By identifying forms of work organization, the method shows that the farmers' strategies are not only technical and economic but also integrate parameters relative to work (productivity, working together, freeing up time for other activities, including private activities...). Its use in very different contexts in France where it was developed, underlines its ability to adapt to different livestock farming contexts, and to different contexts of use too, such as research and advice.

Family farming development and the support of Unitrabalho/UEM: a Case studio of Cooperatvama in Peoma/Nova Tebas (Paraná – BR)

Type	Conference Paper
Author	Maria Nezilda Culti
Author	Nanci Aparecida Meneguetti Garcia
Author	Beatriz Negrelli da Silva
Author	Maria Clara Corrêa Tenório
Author	Gheysa Julio Pinto
Author	Gabriela Silva de Jesus
Author	José Marcos de Andrade
Place	Maringa (Brazil)
Pages	6
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	<p>Family farming is very important, in Brazil, for food production as well as for job creating potential and income generation. It is no different in the cities of Parana State. However, the most crucial problem for small farmers is the great difficulty for them to plan either their production in an economically viable manner, or their technical guidance, mainly in marketing. To help them to manage and overcome these difficulties, there is an Incubator of Solidarity Economy Enterprise, Unitrabalho Incubator Center of the Maringá State University (Unitrabalho/UEM), which works to provide consolidation and strengthening for these groups of small-scale family producers to organize themselves collectively in self-administrating cooperatives. Among these cooperatives, there is a specific one, COOPERATVAMA that produces certified organic fruits. It was created and is still being accompanied by incubator aiming at supporting them in the implementation of a more efficient way of producing, generating employment and income in a region with its very own particular characteristics. It was concluded that incubation has brought positive results for these producer members, since they can rely on support for technical guidance on producing, organization and management and when accessing public procurement markets, when selling, thereby generating income improvement and increasing the quality of life of family producer members.</p>

Tragedy of commons versus labor in livestock farming in the NWCZ, Egypt

Type	Conference Paper
Author	Ibrahim Daoud
Author	V. Alary
Author	Jean-François Tourrand
Place	Maringa (Brazil)
Pages	7
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	None.

Changes in work and its organization: the example of livestock farming

Type	Conference Paper
Author	Benoît Dedieu
Author	Gérard Servièrè
Place	Maringa (Brazil)
Pages	10
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

Transformations in work with livestock are structural. In OECD countries, it is due to the increasing size of the farms. They are sociological: livestock farmers want to have better living conditions as work active population. Technologies that aim at better efficiencies drive changes in work as well. Livestock farmers integrate all these transformations and adapt their herd and land area managements while reorganizing the other components of work organization (equipment and workforce). The work models proposed by livestock scientists, with borrowings from economics, ergonomics and social sciences, consider that neither the work nor the workers, nor the periods of the year are equivalent. They try to connect the different farmer's figures of technico-economical manager, work organizer and a sensitive operator and make it possible to qualify work organization and assess its efficiency and flexibility. The proposals have been taken up by advisors in France and abroad. They contribute to the emerging community of research, extension and education which has been created over 25 years around this theme, which is strategic for the future of livestock farming.

Individual and collective advice to livestock farmers. A focus on advice about working conditions

Type	Conference Paper
Author	Anne-Charlotte Dockès
Author	Pastora Correa
Author	Florence Kling Eveillard
Place	Maringa (Brazil)
Pages	10
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract Work today is a great concern for livestock farmers, even if they do not always translate this concern into a request for advice. For their part, the advisors do not always know how to tackle this question and await training programs, methods and tools. In this paper, we begin with a brief presentation of the theoretical foundations on advice and the methodological principles we deduce from this. We then propose an analysis of the diversity of advice situations, cross-referencing their themes with the form and target of the action. We will then deal with specific characteristics of advice about work, a complex, multifaceted and intimate theme, comparing situations in France and Uruguay, and illustrating this view with precise examples of advisory actions in the two countries. Finally we reflect on the degree of specificity of advice about work and seek to identify key factors for the success of advice given and the difficulties encountered during its implementation.

What are the differences in quality of work between vegetable growers in agroecological and in conventional systems?

Type	Conference Paper
Author	Antoinette M. Dumont
Author	Philippe V. Baret
Place	Maringa (Brazil)
Pages	10
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract The present study explores the quality of work of vegetable growers for the fresh markets, in a diversity of conventional and agroecological systems. In the literature, we identified nine dimensions determining the quality of work: autonomy and control level, income and social benefits, work (in)security, political experience at work, time at work, job intrinsic benefits, job painfulness, health safety and competence. The production of vegetables in the Walloon Region (Belgium) may be categorized in four main types, ranging from market gardeners on a few hectares to cereal farmers who include some vegetables in their crop rotation. Each type was studied in both agroecological and conventional agriculture. We conducted 41 semi-directed interviews with vegetable producers. In addition to the evaluation of the nine dimensions, production and commercialization systems, professional path, history, orientation to work and perception of the future were addressed. The first five dimensions appeared to be very central to understanding, in our specific context, what distinguishes the different types of production from each other. In the present paper and for each group of producers, we will focus on these five dimensions from a qualitative point of view in order to illustrate our general conclusions to the study on the quality of work. Each group of producers is confronted with the necessary trade-offs between the various dimensions. For each dimension indeed, the quality of work is not systematically better for producers in agroecological agriculture. This appears particularly true for market gardeners on small areas.

Land Reform and Solidarity Economy: COPAVI Case in Paranacity (PR, BR)

Type	Conference Paper
Author	Nanci Aparecida Meneguetti Garcia
Author	Maria Nezilda Culti
Author	Beatriz Negrelli da Silva
Author	Maria Clara Corrêa Tenório
Author	Vicente Chiaramonte Pires
Author	Terezinha Scarabel
Author	Diogo Henrique Mazetto
Place	Maringa (Brazil)
Pages	8
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

The solidarity economy was born with utopic socialists, during the industrial revolution in England. Afterwards it was developed over time throughout Europe. In the 90's, together with globalization, neoliberalism and the increasing unemployment rate, solidarity economic enterprises have been developed and spread around Brazil, resulting in cooperatives based in the solidarity economy, aiming at creating new jobs, income, self-management and solidarity, including several sectors and fields of family farming, settlements, craftwork and feeding. The question raised is if the Cooperative of Agriculture Production of Vitória (COPAVI) may be considered a typical example of solidarity economic enterprise because one of the principles of the solidarity economy is the collective work and the non-hiring of workers, justified by the non-existence of employer-employee relationship, since every member would be the owner of their means of production with no profit target, except the pickings to be shared among the members. The hypothesis posed is that COPAVI may not be entirely considered as a solidarity economic enterprise, due to the hiring of day-workers for sugarcane cutting, and the brandy and organic sugar productions, harming the ruling principles of solidarity economy. This study is relevant for its own complexity of understanding the solidarity economic enterprise whose aim is to analyze the relationship of COPAVI with MST (Movimento dos Sem Terra: Landless Workers' Movement) Settlement Cooperative of Paranacity, located in the northwest of Paraná-Brazil with the principles of solidarity economic enterprise, in order to investigate if it may be pointed out as a thorough example. The methodology applied was the use of primary data selected from field interview visits, plus the use of secondary data such as newspapers and magazine articles, books and agencies linked to solidarity economy in Brazil and to UNITRABALHO/UEM. Results showed that the hypothesis is true, since COPAVI harms the principles of solidarity economy while hiring labor force for the sugarcane cutting and,

consequently, COPAVI cannot be taken in its whole context as an example of a solidarity economic enterprise.

Female Labour in rural settlements in the northwest of Parana state-Brazil: Case studies supported by UNITRABALHO/UEM

Type	Conference Paper
Author	Nanci Aparecida Meneguetti Garcia
Author	Marivânia Conceição de Araújo
Author	Mônica Regina da Silva Scapi
Author	Grasiele Scaramal Madrona
Author	Maria das Graças Ramos Damaceno
Author	Aline Raquel de Oliveira
Author	Beatriz Negrelli da Silva
Author	Gabriela Silva de Jesus
Author	Diogo Henrique Mazetto
Place	Maringa (Brazil)
Pages	6
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	<p>Because of financial difficulties in rural settlements of agrarian reform in Brazil, consequently affecting Parana state, and because the social inclusion of women has become particularly urgent, a relationship was established between the Incubator of Solidarity Economy Enterprise, Unitrabalho, at Universidade Estadual de Maringá (UEM), and two rural settlements in the northwest of Paraná/Brazil. In one of them, named Salete Strozak, located at Itaguajé city, there is the “Associação Bom Sucesso” where there are 22 women members; the other, named “Associação das Mulheres do Assentamento Marajó” (AMAM), has 17 members in the women’s group of this rural settlement, located at Quinta do Sol city. The objective of this study is to analyse the performance of Unitrabalho/UEM supporting the land reform settlements of women and their empowerment in the rural settlement of Salete Strozak in Itaguajé, the Women Society of Marajó Settlement (Associação das Mulheres do Assentamento Marajó - AMAM), the women’s association, in Quinta do Sol and Peabiru, in Paraná northwest. The adopted methodology involved primary data, semi-structured questionnaires, informal conversations and ethnographic research; then, secondary data from literature searches, also data provided by IBGE, the Brazilian Federal organization for statistics approach; Agricultural Census. It is concluded that Unitrabalho/UEM performance helped to strengthen the local economy, to organize, build, articulate and consolidate women in family farming and their organizations and societies, intensifying commercialization and integration, aimed at the sustainability of the small rural producer. As a result, this action also provided better access to products and services in the market because it increased the scale of production, regular supply of products, improving logistics, competitiveness, quality and the rural women’s income. It is clear that</p>

Unitrabalho/UEM was able to achieve the proposed goals, which were to promote the empowerment of these women by the perspective of solidarity and sustainability.

Characteristics and trends of wage labor in tree monocultures in Latin America

Type	Conference Paper
Author	Múcio Tosta Gonçalves
Place	Maringá (Brazil)
Pages	6
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

Taking in account some research I have been doing the last fifteen years, I observed that in Latin America along the past four decades one of the agricultural sectors that gained a significant expansion in the occupied area, in the productivity and in the insertion in global markets for their agrindustrial products was the monoculture of trees, especially the plantation of *Eucalyptus* spp. and *Pinnus* spp. The organization of the timber market (including products such as charcoal, sawmilling, pulp & paper, and steel) has created a wage labour market characterized by the combination of a Toyotist organization of production and work processes in some of its branches and precarious working conditions, which can be described by the practice of slave labour and by the fragmentation of this working class fraction by the adoption of outsourcing strategies. The expansion of this agrindustrial activity also gave rise to and has engendered a social and spatial disintegration of family farming by the subjection of rural world to the logic of latifundia, and has contributed to the subordination of those familiar forms of agriculture and of some segments of society by promoting "progress". It seems that there is a link between the type of products, the organization of such companies and the strategies of organization and exploitation of labour. In this context, the forms of worker resistance to exploitation although they still find some expression in traditional union representation, have distanced from it. Taking this broad framework as a reference, the article describes and analyses what have been the main features and trends in the organization of work processes in the context of the expansion of forestry agribusiness activities, suggesting what are the analytical links that can be made between the development of a disciplined work force and the responses of these workers to the conditions imposed by the forestry companies.

Family farming work organization of agro-extractivist communities in the region of Mambaí, Goiás State, Brazil

Type	Conference Paper
Author	Stéphane Guéneau
Author	Janaína Deane de Abreu Sá Diniz
Author	Sabina Dessartre Mendonça
Author	Igor Amaury Aveline
Author	Eric Sabourin
Place	Maringa (Brazil)
Pages	10
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

Located in the center of Brazil, the Cerrado biome is the most diverse savanna in the world and covers about a quarter of the country area. However, since the 1960s, an ongoing agricultural expansion has led to profound transformations of the natural landscape of this biome, notably through land conversion. The remaining areas of native vegetation is a living and working place for many traditional communities and more recent rural settlements, who undertake low-impact agricultural and extractivist activities. Extractivism in the Cerrado constitutes harvesting of many Non-Timber Forest Products, especially Pequi fruits (*Caryocar brasiliense*). This proposal aims to study the agroextractivism systems in Mambaí district, Goiás State, central Brazil, by describing their work organization, by analysing participation in the market, and by discussing the challenges they face. Data was gathered in socio-anthropological fieldwork through semi-structured interviews with over 40 agro-extractivists in rural settlements, visits to farms and observation of the town's weekly street market, followed by interviews with the main actors along the value chain. Results show that farmers have different strategies of production and combine different activities within their household. Regarding Pequi, there are many products obtained from the fruit, the commercial ones (mainly Pulp Preserves) being different from those for household consumption. Harvesting and processing the fruits is a family activity, almost always led by the women. Different products are sold through different commercial channels, including: direct sales to consumers (on orders or at the street market) or directly to local and distant industries, but mostly through intermediaries. The complexity of the relationship between the latter and the agro-extractivists is discussed. Although the income generated by these sales is important and complementary, access to markets appears as a main issue. Therefore, projects and public policy should address basic market access needs, by focusing on marketing, legislation requirements, transportation and especially entrepreneurial management.

Youth engagement in agriculture: challenges and opportunities

Type	Conference Paper
Author	Ibrahima Hathie
Author	Idrissa Wade
Author	Madické Niang
Place	Maringa (Brazil)
Pages	9
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Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract This paper explores why and under what conditions young people engage in agricultural activities. Using a probit model, the study draws on a survey of 1500 households in three different rural areas of Senegal: the Peanut Basin, the Niayes and the Senegal River Delta. The following findings are worth noting: (i) the status of agricultural independence i.e. the possibility of youth to operate a farm autonomously promotes youth participation in agricultural activities; (ii) young women are less likely to engage in agriculture in resource-endowed regions while they are fully involved in precarious agricultural settings; (iii) youth engagement will differ drastically based on life-cycle, matrimonial status and level of education; and (iv) the share of agriculture in global youth revenues constitutes a determinant of youth employment. This in-depth analysis shows the need to design targeted interventions taking into account the diversity of situations (agro-ecological and economic) and status (gender, marital status, age...)

The impact of Precision Livestock Farming on work, skills and human-animal interactions

Type	Conference Paper
Author	Nathalie Hostiou
Author	Jocelyn Fagon
Author	Sophie Chauvat
Author	Amélie Turlot
Author	Florence Kling-Eveillard
Author	Xavier Bovin
Place	Maringa (Brazil)
Pages	10
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

Automation and digitalisation in livestock farms have become more and more important in recent years in many countries, giving rise to what is called Precision Livestock Farming (PLF). The large deployment of sensors and advanced technologies, originated from industry, meets the current economic, structural and social constraints of farms. PLF is developing in different animal sectors to facilitate the monitoring of herds due to the increase of herd size and the decrease of workforce availability. Reducing the hardness of repetitive tasks seems also to be a factor of adoption of these new technologies. This review focuses on the impact of PLF on the farmers' profession and organisation of their work. Time savings are observed due to the introduction of robots and sensors in farms because they replace recurrent physical tasks (milking, feeding) while simplifying the monitoring of animals. Other dimensions of work are impacted by PLF such as work flexibility and new schedules. The information provided may reduce the mental workload informing the interventions required (optimal moment for insemination, detection of health problems to anticipate curative action). However, PLF also creates new tasks such as maintenance and monitoring of equipment, interpretation of data provided by these tools. Thus, the mental workload can sometimes be increased due to the complexity of the information to manage the multiple alarms or alerts. The relationship between the farmer and his animals is also modified. The impact of PLF on farmers' work leads to positive aspects and can be attractive for young people. But work consequences can also be sources of failure if they are not adapted to the needs and skills of farmers. It is therefore essential to take into account farmers' work, and its different dimensions, to facilitate the adoption of these new technologies.

Improved plant genetic biodiversity through the organization and promotion of agricultural shows and seed fairs

Type	Conference Paper
Author	Aimé Kazika Kamosi
Place	Maringa (Brazil)
Pages	3
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

Congolese agriculture has to overcome a number of problems including low productivity due to the lack and poor quality of plant breeding and improved seeds, to the uncertain mastery of climatic conditions (rain, temperature, humidity, soil), low yield per hectare, the lack of financial and technical support and the absence of a national policy to provide small farmers with better technological support. These effects have an impact on the lives and livelihoods of populations totally dependent on agriculture. Moreover, the difficulty in obtaining locally adapted seeds is often seen as an impediment to production. Farmers can be involved in the production and distribution of seeds from selection and thus strengthen informal seed systems for genetic improved plants to increase agricultural output. Furthermore, farmers are managers of agricultural biodiversity, must have the knowledge and technical skills to enhance their effectiveness in preserving it. Despite their efforts to preserve biodiversity, small farmers are excluded from modern seeds that increase production, keep growing their favorite products and only exchange experiences with neighborhood farmers, which does not guarantee high agricultural performance and seed supply to ensure food self-sufficiency and survival against climate hazards. Note must also be made of the low level of information that does not allow peasant communities to develop their technical capabilities. This makes them very vulnerable from economic, social and climatic points of view. This vulnerability is compounded by several factors in terms of practices that reduce the yield per hectare or maintaining low production. Today, several technical solutions related to agricultural innovation are being considered to improve conditions that allow producers to ensure agricultural productivity and food security and also, to guarantee wellbeing. The organization and promotion of agricultural fairs is a peasant expression in informal ways of seed exchange in the villages for genetic improved seeds. (Dindo et al., 2005)

Institutional incentives and new forms of accessory work on family farms

Type	Conference Paper
Author	Olena V. Kovtun
Place	Maringa (Brazil)
Pages	7
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	<p>Within the context of the socioeconomic changes in the agrarian sector in the state of Maranhão, Brazil, the study aims to analyze the dynamics of reorganization in the field of rural work and the emergence of new alternatives of organization of the rural spaces of production. We understand that the production households try to survive capitalist pressure in the reorganization of agriculture in Brazil, developing new production practices (whether or not connected to agriculture) that would enable them to maintain their social reproduction. With the analysis of models presented in national statistical documents, the data are revealed that characterize these new alternative forms of accessory work when taking into account the family as the decision space. It is noticed that there are internal factors that determine choices, including the decisions taken by the peasant economic unit (UEC). These factors are in permanent articulation with external factors, such as the likelihood of credit, access to product and job markets, as well as the chances of institutional support.</p>

Rural employment in Brazil: Farm work decline between 2001 and 2009

Type	Conference Paper
Author	Antonio Carlos Laurenti
Author	Tiago Santos Telles
Author	Guilherme Marcondes Ganade
Place	Maringa (Brazil)
Pages	10
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

In the last decade of the twentieth century, Brazilian rural population dynamics were characterized by the growth and diversification of the rural working-age Brazilian population, product of the unusual increase in the Economically Active Population (EAP) domiciled in the rural area and with non-agricultural occupation. The intention of this study is to characterize the unequal incidence of EAP decline employed in agricultural activity as to size and main activity of farming enterprise, using micro data from the National Household Sample Survey (PNAD) for the period from 2001 to 2009. From the evaluation of the results obtained, it may be accepted that the continued decrease in rural EAP engaged in commercial agriculture was not sufficient to change the pre-existing numeric predominance of the Self Employed occupational category and the difference of the predominant main activities between different farming enterprise sizes. It can be considered that fifty years after the modernization of Brazilian agriculture began, the rural EAP employed in commercial agriculture remains heterogeneous in its composition and the major share continues to be part of the production process without the intermediation of the formal labor market. In other words, informality still prevails in the employment relationship, i.e., still retains the economic differentiation associated with land ownership, as well as the predominance of informality of employment

Persistence and renewal of cooperation in farm work in French agriculture

Type	Conference Paper
Author	Véronique Lucas
Author	Pierre Gasselin
Place	Maringa (Brazil)
Pages	11
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract Cooperation in farm work is often considered as a disappearing phenomenon in modern agriculture. This paper analyzes the historical and current factors explaining the persistence and continuous renewal of cooperation in the French context. Some case studies among the French machinery cooperatives were mobilized to illustrate the general trends. Economic and technical transformations of the agricultural work, public policies and social movements historically contributed to change and renew the modes of cooperation in French agriculture. More recently, grass-roots processes have renewed cooperation in farm work, from initiatives triggered by the diversity of French farmers. We finally highlight and discuss the need for deeper research on this complex topic.

Farm machinery cooperatives: a new arena for agroecological innovation?

Type	Conference Paper
Author	Véronique Lucas
Author	Pierre Gasselin
Place	Maringa (Brazil)
Pages	10
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract In France, new agroecological policies demonstrate a movement of collective innovation experienced by farmers within machinery cooperatives. The present paper aims at understanding how French farmers recombine machinery- and labour-sharing arrangements by developing agroecological practices. Our methodology is based on six case studies, by combining a farming system and a sociological approach. Farmers implement new practices that reconfigure more diversified farming systems with fewer inputs. The collective organisation provided by the machinery cooperative and its associated labour-sharing arrangements shape a niche of innovation conducive to agroecology. These results provide a better identification of the current lock-ins that limit agroecological transition at the farm level.

What evolutions for wage earners' work in farms after hiring? A case study in dairy farms in Auvergne, France

Type	Conference Paper
Author	Priscila Duarte Malanski
Author	Nathalie Hostiou
Author	Stéphane Ingrand
Place	Maringa (Brazil)
Pages	10
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

Enlargement of farms in association with the decrease in the family workforce are inducing the development of permanent wage earners. In dairy farms, permanent wage earners have been recruited to carry out milking in particular. Studies show that human resource management practices can help farmers to retain wage earners in farms, but the authors do not take into account changes in wage earners' work over time. Our hypothesis is that dynamic aspects in work content are crucial for wage earners, because they give them some perspective and good reasons to stay. In this paper, we analyze the evolution of permanent wage earners' work in dairy farms according to a human resource management approach. Individual interviews were carried out with farmers and permanent wage earners who work in specialized or diversified dairy farms. Five pathways of evolution of wage earners' work were identified as well five variables and categories were identified to describe the pathways of evolution according to the assignment of tasks and versatility/specialization.

The contribution of urban and peri-urban agriculture for workers' income generation

Type	Poster
Author	Edinaldo Michelin
Author	Ligia Greatti
Author	Vicente Chiaramonte Pires
Place	Maringa (Brazil)
Pages	2
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

The main objective of this article is to analyse the contribution of Urban and Peri Urban Agriculture (UPA) for income generation among community garden members who operate in the Metropolitan Region of Maringá (MRM). This project has worked since 2008 through technical assistance and urban extension by professional teachers and scholarship students. Qualitative research was developed during which data were obtained from semi-structured interview. Data were submitted to interpretative and analytical approaches. Conclusions identify that activities undertaken by 'urban and peri urban farmers contribute, directly or indirectly, to raising their incomes, i.e. UPA provides direct financial support, besides benefits such as better nutrition, better health, and reduces sedentarism among urban farmers and their families.

Family labour and land use in the Pará rural space

Type	Conference Paper
Author	Dalva Maria da Mota
Author	Ketiane dos Santos Alves
Place	Maringa (Brazil)
Pages	6
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract The aim of this article is to analyze the relationship between family work and access to land in Pará's northeast region. This analysis is underpinned by two factors: i) the paradoxical recognition of forms of family production and criticism in relation to the work of some of its members (young people and children); as well as ii) difficulties in maintaining the slash and burn system for shift cultivation. Research was conducted in four districts in the northeast of the state of Pará: Candéua (Municipality of Irituia) Santa Ana (Municipality of Mãe do Rio), Nova Esperança (Municipality of Aurora do Pará) and Igarapé-Açu (Municipality of Moju). Quantitative and qualitative approaches were combined and encompassed participant observations of working arrangements and (structured and semi-structured) interviews with 269 self-declared heads of household between 2009 and 2014. Main topics were access to natural resources (land, water and forest) and family working arrangements (activities, work division and socialization for work). The main results contradict the initial hypothesis that greater access to land would lead to a higher diversity of occupations within the family group.

Labor market participation and internal migration: the reality behind the choice of Senegalese rural households

Type Poster
Author Ya Cor Ndione
Place Maringa (Brazil)
Pages 2
Date 8-11 November 2016
Conference Name International Symposium on Work in Agriculture
Language English

Abstract This research consists of an analysis of labor market participation and internal migration for households in Senegal' s rural zones. Three categories of rural households are considered: those who work exclusively in farm activities, those who work exclusively in rural non-farm activities and those who combine both types of activities called livelihood-diversified households. Using surveys data for 1500 rural households in three agro-ecological zones of Senegal, we apply a multinomial logit model to empirically examine the determinants of labor market participation and of internal migration. Results suggest that labor market decisions are significantly related to several households, farms, land and agro-ecological characteristics and also to income levels of households.

Senegalese rural households multiple livelihood strategy: a potential solution for rural employment issues

Type	Poster
Author	Ya Cor Ndione
Place	Maringa (Brazil)
Pages	2
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract This paper analyses survey data from three distinct agro-ecological zones in Senegal to shed light on the varied patterns, drivers, and consequences of rural multiple livelihood strategy, defined as households' use of diversification of income sources across the agricultural and non-farm sectors. In policy circles, such diversification of income sources is increasingly being touted as a way to overcome rural underemployment and poverty, yet little is actually known about multiple livelihood strategy among rural households in Africa, including in Senegal. Using qualitative data and primary quantitative data on 1,500 rural households collected in 2013, this paper seeks to fill a knowledge gap by analysing the determinants of multiple livelihoods.

Temporary workers in globalized agriculture. A case study in the province of Tucumán, Argentina

Type	Conference Paper
Author	Guillermo Neiman
Place	Maringa (Brazil)
Pages	6
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

In the current context of social and productive restructuring in agriculture, farms resort to changes in the organization of work and in forms of labor hiring as well. Thus, the development of a "flexible" agriculture will affect, among other dimensions, labor markets and occupational conditions, types of workers, worker recruitment, and farm labor management. This paper is specifically concerned with the characteristics of an agrarian temporary labor market which during recent decades has been undergoing certain changes due to productive and technological innovations in farms, transforming labor markets conditions, and workers' behaviors as well. The province of Tucuman, located in the northern region of Argentina, where traditional crops such as sugarcane coexist alongside with others of more recent expansion and largely exportoriented, such as lemons, soybean, and blueberries, is a place of interest for researching on these issues. Data collected in a wage workers' household survey of 2014 were used in order to examine i) the internal differences in the local temporary workforce in agriculture based upon the different levels of labor intensity that workers are engaged in, and ii) an analysis of the temporary workforce considering such variables as wage levels, migrations, social security coverage, and individual characteristics of the workers as well. The main findings deal with the diversity within temporary workers according to the intensity of work they are engaged in on a yearly basis, and the relationship of this condition with specific labor dimensions.

Transformations in farm work organisation in Australia: the inter-relationship between climate variability, technology and farmers' workforce strategies

Type	Conference Paper
Author	Ruth Nettle
Author	Geoff Kuehne
Author	Kate Lee
Author	Dan Armstrong
Place	Maringa (Brazil)
Pages	11
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

A key challenge for Australian agricultural producers is to continually innovate and adapt in the context of a global economy, technological advances, and a more variable climate. The emphasis in research studies related to agricultural adaptation have tended to focus on bio-physical responses or technological solutions in farming systems with limited attention to the farm workforce and workforce organisation. Yet in Australia, changes in farm workforce organisation in the last decade have been a significant feature of broader agricultural change. Whilst family owned and operated farms are predominant, there has been a reduction in family members as a proportion of the total farm workforce, and an increase in casual (temporary), contract and seasonal workforces including those sourced from overseas. Further, some farm families are implementing 'corporate models' of work organisation involving farm managers and farm management teams. To effectively support agricultural adaptation, it is important to consider: How are farmer's workforce strategies being formed? And, what are the implications of farm workforce changes for innovation and adaptation? This paper examines these questions through reporting on a study of farm workplaces in the Australian cotton production sector. A case study methodology was used involving 16 farm businesses and interviews with farm owners or managers and a survey of their employees (where possible). Data was collected relating to farm business analysis; farm workforce organisation and decisions related to workforce structures; employers' attitudes toward employee engagement and retention; d) human resource management practices; and f) employee training, burnout and work engagement. An analysis of Australian cotton farmer's workforce strategies was conducted by bringing together theories of livelihood analysis and strategic human resource management. Decisions related to the farm workforce were found to influence, and be influenced by, adaptive responses to technological and climate change. The farm workforce can also be used as a strategy for farm adaptation. This has implications for assisting farm managers in their decisions regarding farm workforce strategies and workforce management as well as for

a range of policy areas involving the intersection of technology and innovation, climate adaptation, agricultural extension and advisory systems.

Building the capacity of advisers to support farmers in their people management and workforce decisions: findings from an Australian dairy industry program

Type	Conference Paper
Author	Ruth Nettle
Author	A. Crawford
Author	P. Brightling
Place	Maringa (Brazil)
Pages	9
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

The agricultural advisory sector is increasingly expected to play a role in facilitating on-farm change to support the productivity and sustainability of farming. Traditionally, most advisers have focused on technical issues such as agronomy, pasture management or animal husbandry, but this can ignore the human dimension of running a successful farm business. Combined with increasing reliance on an employed workforce, advisory expertise and capacity to support the human dimensions of farming is now considered to be an important contribution to an advisor's repertoire. To support change in people management and to address workforce issues on farms, Australia's dairy research and development organisation (Dairy Australia) proposed an advisory capacity building strategy. As part of this strategy, a Diploma of Human Resource Management (Dairy) was established in 2008 in conjunction with the National Centre for Dairy Education Australia (NCDEA). Over 120 advisers have participated in this development program including farm consultants and dairy company staff. An implicit assumption in engaging advisers in supporting farm changes is that they are interested in changing their own practices, yet few studies have explored the motivations for advisers to engage in training to develop knowledge and skills outside their routine practices. Drawing on concepts of 'Community of Practice' and the farm-advisor relationship in new professional situations, this paper reports on results from research conducted alongside the Australian dairy program activities in building the capacity of advisers to address the people dimension of dairy farming. A longitudinal survey of advisers completing training and semi-structured interviews with advisers examined the processes that influence advisory practice change. A diversity of advisory motivations for participating in training was found, as well as differences in the extent to which new knowledge and skills translated to new approaches to advising. Not all advisers trained go on to use their newly developed capacity with clients and less experienced advisers differ in their approach to apply new knowledge when compared to more experienced advisers. Ongoing professional development involving advisor networks to maintain relevance and currency of advice was important for sustaining new advisory

practice. The findings have implications for re-conceptualising advisory development

Employment contracts and performance of agroforestry systems with cocoa in the Mbam and Kim area (Cameroon Centre)

Type	Conference Paper
Author	André Nso Ngang
Author	Cyrille Bergaly Kamdem
Author	Philippe Pedelahore
Author	Christian Bernard Kaldjob Mbeh
Author	Joséphine Mireille Akoa Etoa
Place	Maringa (Brazil)
Pages	10
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	<p>This study appreciates the influence of employment contracts on the performance of the agroforestry systems with cocoa (AFSC). It was conducted in the Department of Mbam and Kim in Cameroon on a sample of 114 farms. With DEA method, evaluation of the effects of agricultural contracts on the performance of AFSC was made. For the identification of the factors explaining these performances, the censored Tobit model was used. According to the results obtained farmers practicing compensation contracts by percentage of cocoa sold are relatively more effective than those who use fixed remuneration contracts; 22.3% of the farmers establishing fixed contracts are source of inefficiency; Age and area are sources of efficiency.</p>

The 'blind spot' of agricultural research: the composition and availability of labour, and the 'new worker profile' of farm workers in the South West of England

Type	Conference Paper
Author	Caroline Nye
Place	Maringa (Brazil)
Pages	9
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract Agriculture in Britain faces a number of long-term challenges as the global marketplace continues to expand, world population grows, and an increasing pressure is exerted upon natural resources (Defra 2008). It needs to ensure its place as a competitive, resilient, and environmentally sustainable industry both locally and in the global arena. A key constraint which ties in with all of the above and is also highly relevant to the future of farming in Britain is the availability of labour (Defra 2013), thus contributors to agricultural labour require a more detailed analysis. Whilst some research has been carried out examining the challenges faced by new entrants to the farming industry, as well as those of farmers in attracting the right workers (ibid 2013), with regards to the lived experience of those actors currently contributing to the agricultural workforce, the surface has barely been scratched. Very little literature exists on the small core of permanent farm staff, especially since the publication of Newby's *The Deferential Worker* (1977), and even less on external actors who work on British farms who are neither the principal farmer on the land, nor employed as 'traditional' farm workers. Both governmental departments, in their statistical analyses of all elements of agriculture in the country, as well as academic research, largely ignore the existence of the flexible labour market that has become increasingly prevalent in the farming world in Britain today and the imperative role it plays in maintaining a status quo regarding agricultural labour requirements. As a result, accuracy of data concerning labour use in agriculture has been extremely limited (Ball 1987). This paper will seek to more accurately identify the composition of labour on farm holdings in the South West today, to determine both current and anticipated future staffing needs of those holdings which will provide an indicator as to the proximity of agriculture in the South West to a 'labour crisis', and finally, to ascertain what these changes in labour composition might mean for the future.

Gender analysis of cassava processors' knowledge level of precautionary measures on hazards associated with cassava processing in Ekiti State, Nigeria

Type	Conference Paper
Author	Sunday Idowu Ogunjimi
Place	Maringa (Brazil)
Pages	10
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract The study focused on gender analysis of cassava processors' knowledge level of precautionary measures on hazards associated with cassava processing. Specifically, the cassava processor socio-economic characteristics were described, cassava processing stages were identified, standard precautionary and safety measures being currently used among male and female processors were determined, and appropriate trainings to bridge the gaps in processors knowledge of safety measures were identified. Structured interview schedule was used to elicit information from 156 respondents. Data analysis was carried out using frequency counts, percentage and correlation. The results of the study showed that mean age of both male and female cassava processors was 44.5 years. However, more female (51.2 percent) than male (48.8 percent) were into cassava processing in the study area. Majority of cassava processors were literate. Almost all the processors had household members assisting in cassava processing, which they might have been exposing to hazards and health related problems. Majority have never had contact with extension agents and not attended any training on safety and precautionary measures. They have actually been exposed to different hazards at various stages of the processing. However, both male and female cassava processors had low level knowledge of the precautionary and safety measures to protect them from processing hazards which in turn affected practicing of these safely measures among them. It therefore recommended that training opportunities should be made available to the processors on.

Health in rural environment: an evaluation of postural workers in milking

Type	Conference Paper
Author	Claudilaine Caldas de Oliveira
Author	Antônio Augusto de Paula Xavier
Author	Leandra Ulbricht
Author	Antônio Renato Pereira Moro
Author	Marjorie Maria Belinelli
Place	Maringa (Brazil)
Pages	6
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

This study aims to evaluate the postures of workers in relation to the activities of milking and handling dairy cattle in the region of Campo Mourao Cities Community (COMCAM). As a methodology, to identify the presence of musculoskeletal symptoms, this study is divided into two stages: the first was to identify the demographic profile of the sample through a questionnaire and then try to obtain information about problems with pain and discomfort by applying the standard Nordic questionnaire. The second stage was held on Analysis of the Activity of six farms to identify the natural ergonomic risk factors. For evaluation and recording of postures, we used the REBA method (Rapid Entire Body Assessment) to correlate the prevalence of pain/discomfort with the positions adopted for workers in a production system. The study demonstrated that 87% of workers showed pains and show that the main postures throughout the workday are the tilt and bending of the trunk, characterizing the job that requires, in most activities, awkward postures, with great effort level, the fact that may contribute to the development of musculoskeletal injuries in these workers. The REBA method also pointed out a high level of risk. Therefore, it is possible to conclude that workers, during their work, adopt harmful positions which cause high prevalence of pain/discomfort. Thus, ergonomic recommendations were proposed aiming to reduce these awkward postures of workers and consequently to improve the quality of life at work.

Agroecological transition and reconfiguration of horticultural work among family farmers in Buenos Aires, Argentina

Type	Conference Paper
Author	Gabriela Parodi
Place	Maringa (Brazil)
Pages	9
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract In Argentina, agroecological transition is a process that is being adopted since recently by family farmers engaged in horticultural production. This process involves organisations located in the “Buenos Aires province horticultural belt”, such as the Land Workers’ Union (UTT1) cooperative. The case study presented here shows the challenges of this transition for family farmers, in terms of reconfiguring horticultural work, by emphasising the analysis of the articulation of knowledge, the organisation of tasks and the conditions for sustainability involved in introducing agroecology as a socio-productive model coexisting with the conventional one. The preliminary results shown come from the analysis of primary data (observations and semistructured interviews) obtained during the first stage of the ongoing research. Among the specifics of the case we describe how the process starts and the state’s role in implementing a technical-financial device oriented towards agroecological transition, as well as the creation of an innovative marketing strategy for producers through the sale of sacks of vegetables in short food supply chains. The article takes up some lines of analysis of rural studies in the literature such as land tenure conditions; the degree of capitalisation (availability or otherwise of greenhouses as a production technology), and the producer’s production project. By mobilising these variables we seek to discuss the scope and limits of agroecological transition when the socio-productive and commercial logics that are the driving force behind this process develop unequal readjustment dynamics within the field of study.

Do work simulation tools help farmers to change crop practices

Type	Conference Paper
Author	Elisa Petit
Author	Alexandre Joannon
Author	Jean-Marc Meynard
Place	Maringa (Brazil)
Pages	12
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Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	<p>Introducing new agroecological practice, in field crops, generates changes in work. These changes represent a difficulty for farmers beginning to implement more environmentally-friendly practices. But not much agronomic research has been carried out on the question of work, in support for changes in practices. Studies on the modeling of work organization, however, have led to the development of work simulation tools for farming advice since the 1990s in France. But they have not been used very much by farmers and advisors. So the aim of our study was to compare the responses to farmer demand offered by using these work simulation tools. The challenges were to determine if these tools can be used to help farmers to change their practices in field crops, and with what limitations, and at the same time propose new pathways for research on the question of work in changing practices. For this, we studied the utilization of seven work simulation tools and seven meetings guiding and supporting changes, to raise questions about the work of 58 farmers. We showed that using simulations tools for individual advice is ill-adapted to helping farmers to change their practices, but also that they are only a partial answer to their questions. They only give quantitative answers about working times, whereas the farmers also have questions about organization, skills or labor costs. However, these tools are aids to learning for advisors, who can then mobilize their methodological framework to analyze work, in a context of change. Through this study, we have also shown the importance of using a new approach to dealing with the question of work in agronomy. For this, we suggest taking as a basis the identified limitations of work simulation tools, specifying the information about work that farmers need if they are to make a change, and relying on scientific literature concerning the processes of change and learning</p>

Work and productive aspects due to smallholders' family characteristics by a MFA approach

Type	Conference Paper
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Author	Iremar Neves dos Santos
Author	Sheila Assunção Matos
Author	Renata Gama da Silva
Place	Maringa (Brazil)
Pages	9
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

In this paper we aimed to explore the work dynamics and family influences on it in 40 agricultural smallholdings located in Recôncavo da Bahia region – Brazil. Our approach was a structured interview according to a methodological framework recommended by Foddy (2003). Dataset was constructed by recovering variables of interviews and the modeling method was performed using a Multiple Factorial Analysis. We studied four sets of variables concerning: 1) social and education issues; 2) economic activities developed by the family; 3) trading conduct and 4) work organization. These sets were first considered as Synthetic Analytical Variables (SAV) and then extended to original variables in order to obtain detailed information to provide typology. The major contributions to discriminate and typify the smallholder's farming were exerted by work organization and trading conduct in farming followed by social and education issues. We noticed a linear relation ($p < 0.05$; $R^2 = 0.97$) between age of successors (sons and daughters) and the number and/or diversity of agricultural activities providing income. We did not observe a similar relation with number of children per family or age of the parents (patriarch and matriarch). The rhythms and patterns of work organization seem to be influenced by the age of the successors working in household farms.

Beyond the sugarcane fields: illness and subjectivity of workers

Type	Poster
Author	Tainá Reis
Place	Maringa (Brazil)
Pages	2
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

Sugarcane cutting is an exhausting and wearing kind of work. Because of it, the sugarcane cutters become vulnerable to a series of physical illnesses - such as respiratory, heart and osteoarticular diseases –, chemical addiction and mental diseases which cause them to lose their ability to work. As work is a founding element of identity, the illness is part of an identity scission among cutters. Because of the illness, they then experience stigma and marginalization. The data here presented are the results of the author's current doctorate research, based on qualitative methodology which integrates field interviews

Demography and development paths: what impact on family agriculture sustainability and rural development in Latin America?

Type	Conference Paper
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Place	Maringa (Brazil)
Pages	12
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract Family agriculture definition rests on the criterion of a permanent workforce provided by family, which entails an overlapping of farm and family units. However, although some recent contributions on agricultural development paths stress the role of agricultural workforce demography, debate on family agriculture in developing areas does not raise significantly the issue of family structure change, which comes within the realm of demographic analysis. This contribution intends to raise the issue of the impact of global demographic trends on the evolution of family agriculture and rural development dynamics in Latin America. This sub-continent shows, contrary to other developing areas, an almost “lewisian” path of agricultural development and, in a context of high urbanization, a rather strong advancement of the “second demographic transition”. We shall show that these trends may also concern rural areas and can impact the composition of family units, which leads to an interrogation on the future of family agriculture and the likely consequences on rural development.

How are farmers' strategies-to-last and difficulties related in livestock farming systems? A survey in Auvergne (France)

Type	Poster
Author	Cyrille Rigolot
Author	Jean-Yves Pailleux
Author	Sylvie Cournut
Author	Nathalie Hostiou
Place	Maringa (Brazil)
Pages	2
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	<p>This survey explores the links between adaptive capacities and difficulties in livestock farming systems. For 9 farms experiencing difficulties, from semi directive interviews, we characterize farmers' strategies-to-last (getting bigger, grasping opportunities...), the nature of the difficulties encountered (economic, labour or other) and technical performances. Different strategies-to-last are dynamically associated to different kinds of difficulties. The results are consistent with theoretical literature on resilience, which defines two adaptive "pathologies": « rigidity trap » and « poverty trap », and intermediaries.</p>

Rural youth mobility: COAPROCOR case study

Type	Poster
Author	João Pedro Mariano dos Santos
Author	Ednaldo Michellon
Place	Maringa (Brazil)
Pages	2
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	<p>The family farming production model is affected by the migration of rural youth, since it depends on the family succession for its continuity. The cooperatives play an important role in this sector, not only in production but also in marketing, making it more competitive, which encourages continuity and family permanence in the sector. Thus, the Agroindustrial Cooperative of Producers from Corumbataí do sul (COAPROCOR), located in the Midwest of Paraná, Brazil, makes this link between associated family farmers and the market, seeking to improve the income and quality of life of this population, bringing positive impacts on sustainable regional development. However, this work presents the results of research conducted through interviews (in loco) and proves that young people from the rural properties linked to Coaprocor are migrating to urban areas, in order to search for job opportunities and education in the cities</p>

Value perspectives of producers and consumers regarding the sustainability of the dairy chain in Southern Brazil

Type	Conference Paper
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Author	Livia Galiano Mangilli
Author	Andreia De Paula Vieira
Author	Raymond Anthony
Author	José Antonio Fregonesi
Place	Maringa (Brazil)
Pages	6
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

This research project focuses on the dairy production chain in Southern Brazil and its overall goal is to better inform the dairy chain and related sectors about Brazilian dairy sustainability. Both in Brazil and globally, there has been greater consumer demand for ‘value-added’ food products that are produced sustainably. Producers and the food industry have had to adapt to this new reality. Government programs that realize this cultural shift have emerged to assist stakeholders to reduce the negative impacts of the dairy industry, especially since dairy products are important commodities and key food sources for millions of Brazilians. In order to be sustainable, production systems are challenged to move beyond economic profitability and address environmental and social issues. In this context and as Brazilian consumers experience greater economic mobility and become educated about sustainability issues, it is important to investigate the views held by local dairy producers and consumers regarding the sustainability of the dairy chain. The sustainability of the dairy food chain can be analyzed through indicators such as environmental integrity, economic resilience, social well-being and animal welfare. Identifying how social preferences, science, technology, moral values and practical concerns coincide is critical for the current and future needs of the Brazilian dairy sector.

Rural women's work in conventional agriculture and agribusiness firms in Egypt: a comparative study

Type	Conference Paper
Author	Ashraf Abdellahi Mahmoud Solyman
Place	Maringa (Brazil)
Pages	11
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

The current research is part of an extended study, which aimed to investigate the nature of rural women's work and their contribution of their work activities in agriculture sector measurement. In addition, it makes a comparison between rural women's work in conventional agriculture and agribusiness firms, while the current research deals with the measurement of rural women's work in conventional agriculture. Moreover, it tried to deal with this issue theoretically and empirically to show the deficit in rural women's work measurement mainly in conventional agriculture. Theoretically, the research depends on two approaches, Time Budget approach and Opportunity cost approach, which provide an image of the situation of rural women's work. To deal with the different aspects of this issue, fieldwork was handled using quantitative and qualitative approaches including three methods; social survey, Time budget, and case studies. In addition, appropriate data tools were used to fulfil these approaches. The data were collected from a village in Upper Egypt. Some appropriate statistical tools were employed. The most important results were distinguished between work activities and other activities, whereas the research focused on the productive work activities. On the other hand, the research could determine the extent of rural women's contribution to agricultural work, which was a large contribution especially at the household level and the time spent for agricultural work compared with other activities. Most of the women's work is not measured and not paid.

Coping Strategies with Food Insecurity in two Egyptian Villages

Type	Conference Paper
Author	Ashraf Abdellahi Mahmoud Solyman
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Place	Maringa (Brazil)
Pages	12
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

This research aimed to investigate the relationship between food insecurity and coping strategies in Egypt, especially looking into how rural people cope with their food insecurity situation at the village and household level. The concept of ‘food security / insecurity’ is used as officially defined by FAO, but with some reservations. We assume that the problem of food security is a structural problem, related to the production and consumption relations, in addition to unequal distribution of wealth in general and land in particular. Having started with stabilization policies and Structural Adjustment Programs (SAPs), liberalization has led to more poverty especially in rural areas, and the poor became more vulnerable to food insecurity. We employed qualitative approaches for analysing and dealing with the research aim on the micro level. What resulted from neo-liberal policies is “in-securing food” instead of “securing food”. In the meanwhile, people, mainly in rural areas, showed high level of coping ability vis-à-vis their food insecurity, at least until they reached the peak of crisis, which reflected in the upheaval in 2011. Data were collected from two villages in 2014, within an unstable context politically one from Lower Egypt and the other from Upper Egypt for their different cultural, social, and economic situations. We tried to look into the limitations and potentiality of rural local knowledge and practices, and how they are coping with food insecurity, as well as future perspectives of potential civil movements to address food security issues in Egypt. In conclusion, we have tried to redefine the “food security” concept and look for appropriate alternative concepts that can deal with this complex phenomenon. In addition, we have tried to make a classification for coping with food insecurity from a qualitative point of view and introduced a typology for coping strategies. Taking into account some of the factors, such as agricultural labour, household work, and others, such investigations on the macro and micro levels help us to a deeper understanding and contribute to ensuring food for all.

Family farming in Senegal: the situation of unpaid rural young workers

Type	Conference Paper
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Place	Maringa (Brazil)
Pages	8
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

This article reviews the critical situation of young people working in family farms of two different agro-ecological zones in Senegal by highlighting the issue of unpaid young family workers. The data used are based on a household survey conducted by the Initiative Prospective Agricole et Rurale (IPAR) in 2013 in two different agro-ecological zones: a rain fed zone (groundnut basin) and a developed / irrigated zone (Niayes / Delta). The results of the analysis highlight the importance of the proportion of young people in the family farm's labour force composition. However, many of them occupy the status of unpaid family workers and are therefore not involved in decision making. These young people, due to the situation of unpaid work they face, are not encouraged to provide much effort in the job and are looking for other solutions outside the agricultural sector; around 60% of young people expect to find shortly a job outside the agricultural sector. The situation could be explained by the fact that they do not have any incentive to work hard. By using the opportunity cost approach, the value of the unpaid work for these young people has been assessed. The estimation results have shown the importance of factors related to their human capital, the family farm and the local labour market in the determination of opportunity cost for unpaid youth workers. The problem of pay for young people working in the farm remains a real challenge for family farms. This situation does not encourage young people to work and therefore causes a loss of earnings not only for themselves but also for their families. Thus it is necessary to redefine and promote the role of young people within the farm as their needs increase. Unfortunately if their role is not promoted, young people are likely to turn away from the family farm activity.

Implementation of integrated instrumentation in the evaluation of occupational hazards in shellfish farming

Type	Conference Paper
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Place	Maringa (Brazil)
Pages	9
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

In aquaculture, there are few studies in the literature regarding the use of assessment tools that reflect the physical condition of workers in their activities. The use of ergonomic methods provides much information on the assessment of worker adjustment to working conditions, in order to ensure safety, comfort, satisfaction and well-being. Through these methods, the activities developed by workers were followed in a shellfish cultivation farm, which presents occupational hazards, such as muscle overload and inadequate postures. Thus, the main goal was to assess the risks in the work environment using integrated instrumentation. The instruments used were infrared thermography, environmental variables, grip strength and motion capture, in addition to a protocol established by the team through observation and audiovisual recordings of the activities. Samples were collected in different days to avoid interference between the data collected. The results indicate that the integration of technologies for data collection provides important information regarding the risks encountered in the development of the activities. Infrared thermography let us detect temperature increase of the upper limbs due to the muscular requirement of the management of the lanterns. With the decibelimeter, we found greater intensity of sound-pressure in the washing machines of lanterns and oysters, but the results indicated that the noise levels produced by the machines remained within the limit allowed for a maximum exposure of 8 hours a day. The mean grip strength indicated overload in the hands and wrists in the step of washing the lanterns. With the motion capture, muscle overload was found in the lumbar region, shoulders, hands and wrists, during the management of lanterns and classification of oysters by size. The lack of studies on this topic highlights the need for new investigations on the occupational risks integrating tools, so that the work environments are designed considering technical features of construction, the activity to be performed, the time spent at work and mainly in worker characteristics. In addition, the collection and the use of data should take into account the appropriate

instruments of analysis and the factors that may influence the results. The data obtained in this study may be useful for the design and development of new products and workstations for shellfish farmers to reduce the risk of musculoskeletal injury.

Ergonomic analysis of work in poultry

Type	Conference Paper
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Pages	8
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

Agricultural work is the oldest activity that is known, characterized by the multiplicity of its tasks. Even with technological developments agriculture is one of the sectors that present risks to worker safety and health. In Brazil, several studies have been done in the area of ergonomics and safety, but few in agriculture, seeking to evaluate the working conditions and productivity of these production systems. As such, the objective of this study was to identify the risks present in the working environment on a poultry farm with the intention of discovering and analysing the facilities and difficulties found in the execution of tasks. Socio-demographic questionnaires and interviews were used as instruments of general data collection. Besides that, the Nordic Questionnaire was applied for the verification of musculoskeletal symptoms. The farm is located in Ponte Serrada (26° 52' 19" S 52° 00' 57" W), Brazil and produces milk and broilers. The physical structure consists of a kitchen, a bathroom, a depositary and a tool room. The tasks are carried out by two workers (A and B). Worker A is 47 years old and has incomplete elementary education. Worker B is 23 years old and has a college degree. The working day is 11 hours daily, starting at 6 in the morning and finishing at 5pm. The ergonomic hazards found in the activity are due to inadequate postures and intense physical exertion. The workers reported incidences of pain in the back (eg lower back), joints, muscle aches and knees. The management of warehouses with these animals requires moderate physical effort with lifting and manual transport of loads such as hand tools, without the aid of auxiliary transportation equipment, as in the case of bags containing feed. This makes the work a mechanically stressful process involving a high energy cost due to the continuous pressure exerted on the muscles of the arms and back during the transport of weights. These conditions can cause fatigue, body aches, among others, which can lead to sick leave for occupational diseases such as low back pain, which is a major cause

of absenteeism. There is no formal prescription of tasks, thus cognitive mobilisation is required for the interpretation of situations and decision making. As such, the development of research to discover critical points in the productive process are more and more relevant for the development of action plans that can improve the activity from an occupational point of view.

Coping with agronomic constraints in crop/livestock systems through the management of work within the farms: a case study from two regions in Morocco

Type	Conference Paper
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Pages	10
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English

Abstract

Two investigations were carried out to characterize the ways crop/livestock farms manage work constraints as a mean to cope with limits in land, water and capital. The investigations were based on the application of the “Work Balance” method in 44 farms, mainly smallholder units but also larger farms, located in two different regions of the country. A first investigation protocol was applied in 30 family farms of different sizes and capital uses in a rain-fed agricultural area with possibilities of groundwater irrigation. The study showed that very small-scale farms (less than 1 ha) specialize in cattle rearing, with an important share of endogenous work being dedicated to this activity. By contrast, farms with more land and capital tend to diversify their activities, mainly towards cash crops (vegetables and fruit trees), resulting in an increased use of off-farm staff, while at the same time maintaining livestock activity, because of the regular incomes it allows. The second research protocol consisted in the use of the “Work Balance” method in a sample of 14 diversified family farms in a large scale irrigation scheme. Work times in each agricultural activity (livestock and crops) were quantified, distinguishing the contributions of family members and those of the off-farm workers. Altogether, the results of the two investigations confirm the crucial participation of smallholder farms in the supply of raw milk and beef, given they have almost no options in investing in cash crops. However, the limited gross margins received from cattle rearing may imply that it could have limited attractiveness for the young generations. On the other hand, in larger farms, livestock is kept as a mean of diversifying the sources of incomes, farmers criticising its very limited gross margins and its relatively high needs in work. Finally, in a context of growing tensions on worker availability, it appears that work, whether assumed by family members or off-farm staff, is becoming an increasing source of troubles in Morocco. This may add constraints for the achievement of ambitious increases in staple food output in the coming years.

Research and development organizations get organised to consider the work component of livestock farming in Wallonia

Type	Conference Paper
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Pages	11
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	<p>Increasing farm size with constant labour results in increased work productivity. Farmers would like to have better working conditions, more free time, etc. The acquisition of working time reference points and the setting up of a network of work organisation advisors are two examples of concrete initiatives for the benefit of Wallonia's cattle farms. Advisor training to support farmers in connection with work organisation, mixing theory with practice, has been put in place in partnership with some French organisations. The founding principles are the acquisition of concepts and the design, by the participants, of tools suited to the Belgian context. The work aspect of livestock farming is a sensitive area involving people's lifestyles, making it difficult to discuss it with farmers and requiring the advisor to play a particular role. Awareness-raising campaigns have been conducted among players in the field to demonstrate that improvements are possible.</p>

Securing Sahelian pastoral activities through the use of remunerated labor: ambivalence of monetization

Type	Conference Paper
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Author	Nelly Njiru
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Place	Maringa (Brazil)
Pages	8
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	<p>Sahelian pastoralists are usually portrayed as people living under uncertainty: they lack contingent markets and use mobility and diversification/multiple activity as adaptation strategies. Their complex relationships vis-à-vis this uncertain environment hide the transition from a traditional inward looking to an outward looking economy characterized by increasing recourse to remunerated labor. However, this growing monetization of their economy is not neutral and could generate new forms of uncertainty. A Principle-agent model helps to analyze the remunerated labor as an ambivalent strategy to structural uncertainties in the Senegalese Sahel. Then, the paper highlights the conditions of production of trust and reputation in employee-employer relationships developed by pastoralists to better face up to these uncertainties.</p>

Impact of scientific and technological innovation in the Brazilian agribusiness sector

Type	Conference Paper
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Place	Maringa (Brazil)
Pages	11
Date	8-11 November 2016
Conference Name	International Symposium on Work in Agriculture
Language	English
Abstract	<p>The inclusion and use of technology in the agroindustrial sector involve changes in organizational and work distribution structures. The scope and purpose of this study is to analyze and reflect on the impact and relevance of the use of scientific and technological innovation in the agribusiness sector. In order to generate spaces for debate and discussion that offer alternatives related to innovation, It assumes that scientific and technological development are essential tools for the growth and progress of the sector, which also require improvement in the design of useful and effective public policies, avoiding losses and increasing profits in the sector. The methodological approach is used for qualitative and constructivist collection techniques. The information will be analyzed according to a theoretical basis and further observation and literary criticism. The results obtained from the analysis of the impact of innovation in the agroindustrial sector show that there is little coordination of public actions for projects and policies on scientific and technological innovation in the sector; poor design of public policies that benefit the producers; scant use of the opinion and needs of the producer; Instability, insecurity and poor predictability; Inadequate guidance and management of activities and innovation projects for the sector.</p>