

Changes of economic institutions on Namibian marula fruits as impacts from biotrade

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Abstract - Marula fruits are traditionally gathered and processed as collective actions of Namibian local women. After the abolition of apartheid and expansion of commodification of marula fruits products, biotrade of marula oil has been implemented through alternative trade contracts for the income increase of local women. This study conducts an institutional analysis on changes of rules on marula fruit uses as impacts from biotrade. The findings reveal the significance to consider gender power asymmetries and unstable social context.

INTRODUCTION

Marula is one of the traditionally used multipurpose fruits trees in North Namibia (Shackleton et al., 2003). A traditional custom rule regulates gendered property rights on access to marula fruits and its processing as collective actions of local women, representing significant roles of women in the conservation of marula resource and regional culture, including barter-exchange of marula fruits products. After the independence of Namibia from South Africa in 1990, the abolishment of apartheid and the expansion of urbanization have been promoted the commercialization of marula fruits products in local markets. With the harmonization of these two governance structures, the Namibian government initiated to establish the commercialization on marula crude oil since 1996, in order to increase income opportunities of local women (Du Plessis, 2006). Oils, produced as an indigenous natural product of the Eudafano Women's Co-operative (EWC), are transferred to two overseas foreign customers with premiums of higher payment return through two biotrade contracts; the Body Shop UK through the community trade program and a French cosmetic company Aldivia through an ABS (Access to genetic resource and Benefit Sharing) contract (PTA and Aldivia, 2006; the Body Shop, 2007), developed from the third objective of the UN-CBD (UN, 1992).

In order to ensure additional values on their products, impacts from biotrade on rules of resources uses at local level from gender perspective can be one of the critical criteria for consumers to select their products. From this sense, this study aims to explain mechanisms of actor's choices on economic actions as a sequence of institutional changes under interactions between designed institutional sets of biotrade, developed in Western social

context, and Namibian social context. We elucidate changes of four-level economic institutions (Williamson, 2000) with conceptual spaces of action arenas, by the adaptation of the Institutions of Sustainability (IoS) Framework (Hagedorn, 2008) as an analytical framework. This with the concept of power from Herbert Simon (1959) provides logical explanations on institutional innovations, generated in unintended ways, which change power asymmetrical status of actors.

METHODS

Conventional economic methods tend to set a premise that economic phenomena have the regularity of a closed system, based on which the phenomena can be explained by parsimonious theories. However, Critical Realism asserts that the actual economic phenomenon do not contain such regularity. Rather actors select choices, based on intentions, customs, etc. Therefore, this study respects the significance of analysing systems of human thoughts and images, which can be summarized as analysis on culture or to use the term of Foucault (1979) discourse. Analysing discourse within the scope of this research is a method to elucidate economic phenomenon under social and historical context; therefore, this study conducts qualitative analysis.

The data on custom rules on marula uses were mainly collected by document surveys; those on its present uses by different interview methods of semi-structured and unstructured interviews with 31 individuals and groups, such as the EWC, villagers, CRIAA, and Namibian ministries, during a fieldwork in Namibia in 2011. Data are analysed by coding texts with the aim to extract concepts and categories, whose links are logically explained as institutional changes under the IoS framework with concept of powers.

RESULTS

We found five phenomenon as recent changes of economic actions. Two of them indicate changes of resource uses on marula.

- The rich literate members of the EWC tend to leave for better paid-work and the youth are not interested in agricultural activities.
- Some villagers stop collecting marula fruits, or in some cases, chop down marula trees.

In addition, three of them represent power relations of villagers.

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- Regarding marula fruits collections, some husbands support their wives of EWC members by collecting fruits although a customary norm strongly prohibited for men even to come close to trees during harvest season.
- In some rich households, processing marula fruits are mechanized by juice extraction machines, originally owned as a common property of the EWC or sold in towns.
- Labour with machine is male dominated as a social belief.

DISCUSSION

We understand these phenomenon with the IoS as institutional changes within four levels as following. The first and second phenomenon can be understood a sequence of institutional changes in an action arena on uses of marula fruits with time scale. The abolishment of apartheid provides a freedom of choices on economic activities as rights of local actors. This political change enables to introduce the new criterion of monetary value on marula products as an institutional innovation of a social norm and to transact them under the newly formed governance structure of local market. This commodification creates the base to introduce commercialization of marula oil. The market has been expanded by the urbanization, which increases not only the flow of money and goods in the village economy but opportunities of well paid-non-agricultural jobs. In addition, urbanization alters beliefs, values and behaviours of local villagers, which become a trigger to decrease relative values of processing marula or even trees and incentives to keep following custom rules. These institutional innovations at two levels increase financial incentives for the literate rich that face an action choice on labours and move away from agricultural activities and even traditions of processing marula.

The third phenomenon represents an action arena of gender allocation of access right to fruits. The designed institutional performance of biotrade creates two institutional innovations at social cognitive level and resource allocation level. The economic incentive to increase household income motivates men to infringe an ethical code and risk of moral sanctions of other villagers. This enables for some EWC members of local women to allocate her access rights to fruits not for neighbours of other local women but for men in her household.

Following the fourth phenomenon, mechanization enables the intensive resource use of the rich. Consideration of the transformation of the property of a machine and the reduction of cultural values on marula collective processing, marula fruits can be consumed as private goods of the rich. Referring to a tendency of male occupation of income resource in this region and the fifth phenomenon as a system of thought (Haugaard, 2003) to habituate considerations on gender labour allocation, female labour may be substituted for the male in future.

These changes of property right institutions can not only reduce income sources of local women but, referring to Howard (2003), traditional knowledge on in-situ resource conservation, social capital of local support network and cultural diversity. These institu-

tional innovations as adverse effects from biotrade may not ensure additional values on EWC products.

This study elucidates institutional performance, designed by institutional sets of biotrade, generate institutional innovations in unintended ways under dynamically changed social contexts. In order to ensure objectives of biotrade as income increase of local women, it is significant to consider gender power asymmetries and unstable social context in designed institutional changes of biotrade. This institutional analysis evaluates to what extent biotrade on marula oil is success.

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