Chapter XVI

Management of New Genetic Knowledge for Economic and Regional Development of Ethnic Minorities in China

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Abstract

The banking of genetic appliances and DNA represents an attempt to understand sustainable use and preservation for the benefit of current and future generations. The goal of this chapter is to highlight BioBanking as a tool for accelerating knowledge, understanding, conservation, and sustainable use of biodiversity. Genetic biobanks, collected from indigenous peoples, may pose some ethical risks for the ethnic populations. The new information in the hands of insurance companies, employees or governmental agencies could mean insecurity for ethnic minorities if the use of information violates the fundamental human rights of ethnic people. The new genetic knowledge may alter the relations between the individual (the self) and the community; the individual and the state; and the community and the state. This chapter will explore the technical issues, difficulties and benefits this tool provides when dealing with marginalized ethnic populations in Southwest China.
Introduction

In this chapter, the author has tried to give an overview on genetic sampling of ethnic minorities (minzu) in China and to the different claims companies and research ventures have on this industry. It will look at the following question: how the new genetic knowledge—acquired by biobanking activities—could be turned into ethically sustainable, economic, and regional development of ethnic minorities in China.

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Indigenous people groups in Southwest China and in other parts of northern Southeast Asia (mainland) go through development challenges that are, most of the time, transboundary. Some of the issues concern migration, effects of reforms (P.R.C), and technological knowledge. Genetic biobanks, collected from indigenous peoples, may pose some ethical risks for the ethnic populations. The new information in the hands of insurance companies, employees or governmental agencies could mean insecurity for ethnic minorities if the use of information violates the fundamental human rights of ethnic people. The new genetic knowledge may alter the relations between the individual (the self) and the community; the individual and the state; and the community and the state. This chapter focuses on genetic sampling holistically. This implies that the processes of change alter the social constructions in which minority people live.

However, the banks are also a new potential source of material wealth and health knowledge resources if the new information is applied according to local needs. The issue of information management with genetic knowledge is an ethical one, since businesses are primarily looking for profits, not for the rights of vulnerable people. It is probably impossible to find a perfect solution for biobanking enterprises. However, to avoid the mentioned problems, a model named “Charitable Trust” could be a resourceful framework to apply for the ethnic communities in the Southeast Asian region. This bank, originally proposed by D. and R. Winickoff, is a model for genomic biobanks, which is seen as superior to commercial biobanking. A biobank organized as a charitable trust is created by a trust agreement between the research subject and the owner of the bank. Since the relationship with the “bank” manager and the research subject is mutual, it will be less easy to mishandle the rights of the sampled population. It would be even more advantageous if the “trust” being community based and owned biobank and resource rights regimes that seek to recognise the essentially community-based nature of much of the knowledge related to biodiversity.

The transformations brought about by the “knowledge economy” or “Information Society” are conventionally thought of in global or national terms. But as globalisation and the outcomes of new information and communications technology (ICT) have influenced people around the globe, they are also reformulating and restructuring the regions, though in multiple routes and often with highly differentiated results. The resources accessed from this article...
Electronic Government in Small Island States
Janet Toland, Fuatai Purcell and Sid Huff (2005). *Encyclopedia of Developing Regional Communities with Information and Communication Technology* (pp. 269-274).
www.igi-global.com/chapter/electronic-government-small-island-states/11389?camid=4v1a

Intentional Online Learning Plans
www.igi-global.com/chapter/intentional-online-learning-plans/11423?camid=4v1a