

Emerging Opportunities for the Productive Inclusion of Local and Traditional Communities

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Plants have long provided and continue to provide vital resources for the discovery and development of medicines and for primary healthcare. The World Health Organisation (WHO, 2008) has estimated that for some Asian and African countries, close to 80 per cent of the population depend on traditional medicine for primary healthcare. Further, a review by Newman et al. (2003) concluded that 60 per cent of the anticancer drugs and 75 per cent of the anti-infectious disease drugs approved, as well as 61 per cent of all new chemical entities introduced worldwide from 1981 to 2002, could be traced to natural origins. In various countries, including China, India and Brazil, there now is a growing push to modernise traditional medicine and develop a biotechnology industry by marshalling robust scientific research and fostering the manufacture of drugs by industry to ensure standardised, safe and effective herbal formulations.

While recognising the critical importance of these developments, Patwardhan et al. (2009) also signal the need to explore ways in which 'traditional medicine practitioners can be used more effectively to facilitate delivery of both western biomedical innovations and traditional therapies'. They argue that traditional medicine can offer insights into how to address the 'innovation deficit' that currently exists in the mainstream pharmaceutical industry by pointing to new synergistic combinations and improvements in bioavailability, and by contributing to the development of individualised medicine approaches. The question explored by this One Pager in the context of Brazil is the following: are there ways to strengthen the productive roles of local communities and practitioners who are active in conservation and adding to the knowledge base of medicinal plants through the codification of traditional knowledge and who can provide basic pharmacy services to underserved local communities?

Brazil recently launched a forward-looking *Plano Nacional de Promoção das Cadeias de Produtos da Sociobiodiversidade* (PNPSB) to promote the inclusive and sustainable development of production chains for socio-biodiversity products. Brazil has also introduced a National Policy for Medicinal Plants and Herbal Medicines (*Política Nacional de Plantas Medicinais e Fitoterápicos*), a National Programme on Medicinal Plants and Herbal Medicines (*Programa Nacional de Plantas Medicinais e Fitoterápicos*, PNPMF) and a policy on integrative and complementary practices in the context of its unified health system. To contribute to policy discussions on how to ensure that local communities are not confined to being integrated only at the lowest rung of the production chain or service-delivery platform for phytotherapies and/or phytocosmetics, Lal and Waldemiro Sorte Junior (2011) explore the application of a 'productive inclusion' approach and a regulated market framework. The approach which is a Brazilian social policy innovation typically encompasses social-assistance, production-chain and territorial dimensions and involves a strong focus on integration and partnership activities.

They highlight lessons from previous research on two key initiatives related to the productive inclusion of family farmers into Brazil's food and biodiesel production chains—respectively, the *Programa de Aquisição de Alimentos* (PAA) and the *Programa Brasileiro de Produção e Uso de Biodiesel* (PNPB)—to identify the conditions under which even poor family farmers and under-served areas can realize benefits including the enhancement of productive facilities. As a result of the lack of scalable integration, to date, of traditional medicine in the formal health system, they suggest that the new plan of action on socio-biodiversity products is missing out on the benefits that the provision of demand-side stimuli can provide for productive inclusion activities related to medicinal plants. The pace at which the National Programme on Medicinal Plants and Herbal Medicines is able to advance is thus viewed as being a critical determinant.

They point to the range of 'development functions' that the state is better placed to perform, and that it should perform, in helping local communities better navigate the asymmetries of market-based relationships. These include (i) conducting research to provide scientific validation of traditional knowledge; (ii) offering legal advice and technical assistance on benefit sharing agreements and patent application procedures; and (iii) supporting the productive inclusion of local communities in the supply chain of large firms. These functions are in addition to the provision of financing and technical support. The role of the state is also found to be important in providing a mix of social-assistance and infrastructure support, particularly for poor communities in challenging and underserved areas.

The authors also underscore the important roles that self-organising networks of local communities can play for policy development and for the safe delivery of some types of primary pharmacy services. For example, given the limited codification of plants endemic to Brazil's biomes, the community network *Articulação Pacari* prepared a 'pharmacopoeia' based on traditional knowledge of the medicinal plants of the Cerrado region (*Farmacopéia Popular do Cerrado*). It also promoted good harvesting and production practices to ensure basic health and safety, as well as quality standards for the herbal preparations produced by the community-based pharmacies (*Farmácias Comunitárias do Cerrado*) on which the poor and underserved depend in these areas.

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