

## **Fairness and Gender in Benefit Sharing: Learning from the Kani, San, Nigerian, Kenyan and Icelandic cases for moving forward**

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### **EXECUTIVE SUMMARY**

This report examines the key areas of concern for women in benefit sharing in research raised by the five cases that have been studied in the GenBenefit project. Based on its findings, it puts forward recommendations for policy guidelines and strategies for protecting women's rights in benefit sharing in research.

In recognition of the importance of context in gender issues, this report looks at gender inequality concerns within the larger context of the societies where the cases are located using a comparative analysis of the five cases. It looks into the barriers to and opportunities for fair benefit sharing that arise from gender in particular societal contexts and how socio-economic, political, and cultural changes impact gender-based vulnerabilities in each of the five cases.

A feminist framework that explains the occurrence of gender inequality is utilized to make sense of the persistence of inequality, subordination and oppression of women in indigenous and non-indigenous societies in different stages of societal transformation which are the social settings of the five cases.

A key finding of the analysis is that gender inequalities exist in all the five societies where the cases are located. However, there are variations in degree and manifestations of gendered inequalities which are linked to differences in the socio-economic, cultural and political situation of each society. These variations in turn differentiate the gender concerns in benefit sharing in each of the cases.

It is clear that in all the cases, the most significant and common barrier to women getting fair treatment in benefit sharing is their marginalization in decision-making.

In societies characterized by very low female political participation, high poverty incidence and lack of control of economic assets among women, their direct participation in negotiations and decision-making regarding benefit sharing is minimal. By contrast, in a society like Iceland, although the political gender gap exists there was a greater degree of women's direct involvement compared to the other cases.

To ensure women's active and meaningful participation in the decision-making process for benefit sharing, this report proposes that existing research ethics guidelines should be tapped and mobilized, as well as international and national policies to protect the equal rights of women. Ethics committees and researchers have a responsibility in this regard.

In addition, strategies should be tried to ensure that women are able to meaningfully participate in decision-making with sensitivity to their real life situations and subjectivities, without the imposition of (even well-meaning) perspectives from outside. The idea is to help women build their agentic capacities for meaningful participation in decision-making.

## INTRODUCTION

The five cases involving the use of both human and nonhuman biological resources as well as traditional knowledge that have been examined in the GenBenefit project<sup>1</sup> are located in societies in different stages of societal transformation. The San (Southern Africa) and Kani (India) are indigenous societies that are increasingly being integrated into the market economy, while the Majengo (Kenya) and Nigerian societies are already integrated into the market economy but are facing huge problems of socio-economic inequalities and political instability. Iceland is a wealthy, capitalist-industrialized society with a strong welfare system and guaranteed political freedoms. These cases provide rich material for comparing gender issues in benefit sharing in research between societies in different phases of societal transformation, as well as for understanding the particularities of gender issues in each one.

On the whole, the case studies provide insights regarding the barriers to and opportunities for fair benefit sharing in particular societal contexts, as well as on how socio-economic, cultural and political changes impact gender-based vulnerabilities. In lesson-learning from the cases, we should be able to see how these barriers and vulnerabilities can be minimized, if not eliminated, and how opportunities can be maximized and mobilized.

Those who provide biological resources or traditional knowledge are often poor populations in developing countries and there are issues of fairness in relation to access to and sharing of the benefits of research. Aside from addressing the general issue of fairness in benefit sharing for the poor, there is also a specific need to address this issue for the women in these populations. This is because historical, social, political, economic and cultural factors interactively operate in society resulting in a tendency for poor women not to be fairly treated in the sharing of benefits.

The aim of benefit sharing is the regulation of “fair and just dealings between those who gain advantages from using a biological resource or traditional knowledge, and those who grant access to it.”<sup>2</sup> The GenBenefit project underscores the “need to re-evaluate existing frameworks and (to) suggest realistic alternatives”. It could be that an outcome of this process is an Ethics Health Check (EHC) that identifies fundamental principles and processes that could serve as a guide to help ensure that benefit sharing is fair and just among the parties in the exchange of biological resources and traditional knowledge.

The following core questions may be considered in the formulation of the EHC:

- What are the barriers to fair and just benefit sharing in research?
- How do these barriers operate in particular local contexts?
- Who is disadvantaged by these barriers?

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<sup>1</sup> The reports on these cases have been submitted for the GenBenefit Project - Genomics and Benefit Sharing with Developing Countries – from Biodiversity to Human Genomics. These are available at [http://www.uclan.ac.uk/health/schools/school\\_of\\_nursing/research\\_projects/genbenefit.php](http://www.uclan.ac.uk/health/schools/school_of_nursing/research_projects/genbenefit.php). The fifth case study from Nigeria was incorporated into the project (2007), funded by the South African Government Department of Science & Technology, which granted co-investment funding to the University of the Witwatersrand (WITS) School of Law. This report on Gender in Benefit Sharing from the five cases will not therefore provide details on benefit sharing issues for each case.

<sup>2</sup> See Note 1.

- What policy guidelines are required to minimize the barriers and maximize the opportunities for fair benefit sharing?

If we incorporate gender into the questions outlined above, then we will need to address why gender is implicated in barriers to fair benefit sharing.

- What are the barriers to fair benefit sharing that arise from gender?
- How do these barriers impact men and women in relation to their rights to fair benefit sharing?
- What policy guidelines are required to minimize these barriers arising from gender and maximize the opportunities?

We can define gender as a hierarchical structure that exists in practically all societies in the world today, and which has created norms, institutions, and other structures that differentiate men and women's access to, use of and control over economic, socio-cultural and political resources. Since benefit sharing involves the distribution of resources accruing from the use of biological material and traditional knowledge, gender therefore should be a key consideration in fair benefit sharing. In the consideration of gender in benefit sharing, it is inevitable that the focus is on women's access to, use of and control of resources resulting from benefit sharing. This is because evidence from around the world shows that where gender acts as a barrier to fairness and equality, it is women who are disproportionately affected (King, 2001).

The rights of women everywhere to fair treatment in benefit sharing is a major concern because while there has been much improvement in international research ethics guidelines to address the discrimination of women in clinical and health research, guidelines on benefit sharing in research lack such explicit and specific provisions on how women's rights can be protected (Alvarez Castillo & Feinholz, 2006; International Union for Conservation of Nature [IUCN], 2007).

### **OBJECTIVES OF THE REPORT**

This report examines the five GenBenefit cases from a gender perspective. It identifies key areas of concern for women in benefit sharing in research. The report concludes with recommendations for policy guidelines and other approaches for protecting women's rights to benefit sharing in research.

The following are the specific objectives of this report:

1. To provide an analytic framework for examining benefit sharing in research from a gender perspective;
2. To describe contextual specificities in each case that differentiate gender concerns in benefit sharing;
3. To identify key common areas of concern of relevance to gender in benefit sharing in research found in the five cases;
4. To recommend policy guidelines for the protection of women's rights in benefit sharing; and
5. To identify specific approaches and methods necessary to enable women to protect such rights through their own agency.

## **METHODOLOGY**

This report is focused on gender issues in the five cases that have been examined in the GenBenefit project. It is further limited to issues in communities which are the sources of biological materials and traditional knowledge. It does not include issues that may have been obtained in other groups involved in the benefit sharing processes, for example the researchers.

The decision-making processes in regard to benefit sharing and the bodies that represented the sources of the biological material and traditional knowledge are given particular attention.

This report is the outcome of the following processes: (a) review of relevant literature, both published and gray literature; (b) review of the case reports as well as of other papers produced by the project; (c) validation of initial findings and probing on unclear issues with individual case study authors; (d) development of insights during a series of project meetings and workshops; (e) generation of additional data from resource persons; and (f) examination of the gender report on the Majengo and San cases by Emezat Mengesha.

It is especially helpful that we prepared this report after writing a series of papers with other colleagues on gender and vulnerability and gender and benefit sharing.<sup>3</sup> This report is therefore like a fruit that ripened after going through a process of intellectual maturation. We hope that both the readers and the people in developing countries, especially those involved in research, will in some way benefit from this ripening process.

## **ANALYTIC FRAMEWORK**

It is quite common in development work which focuses on social justice to think about the redistribution of resources and power in ways which will benefit the disadvantaged. There is an underlying assumption in this view that if the disadvantaged community benefits as a whole, then the women also benefit by default; if the community participates in decision-making, ipso facto the women are part of that process (Boserup, 1986).

Too often, women's specific priorities are either overlooked in development projects, or 'tacked on' as an afterthought. Much development work is done without taking gender inequality into account, so that women and children often lose out (Oxfam, n.d., para. 4).

Gender as a hierarchical structure operates in both obvious and subtle ways so that sometimes we need to see data from a particular angle in order to recognize gendered vulnerabilities and inequalities. This is especially so if gender inequality is not a feature of our lived experience. The questions we ask here are important in that these can lead us to search for data that may not be immediately obvious. The challenge is to identify the sites of vulnerabilities and inequalities which are hidden in socio-political formations in order to be able to formulate responses that address the roots of inequality and vulnerability.

Feminist theorizing has provided an analytic framework to make sense of the overwhelming evidence on gender inequality. These theories can be grouped into three categories: (a) on difference; (b) on subordination; and (c) on oppression (Lengermann & Niebrugg-Brantley, 2003).

The theories on difference argue that men and women are socialized differently and experience social life differently, mainly because of their gender. Social changes and the impact of

<sup>3</sup> With Dafna Feinholz and Rosa Cordillera Castillo.

policies and programs, for example, are experienced differently by men and women even where they belong to the same social class or ethnic group. Homogenizing vulnerability or inequality issues on the basis of poverty or ethnicity alone can blind policymakers to these important differences, which in turn can lead to ineffective responses.

The theories on subordination explain the ways in which women are not treated as equals of men in virtually all aspects of social life. This is legitimized by norms and institutions that tend to persist over time.

The theories on oppression believe that women are being denied their basic rights and freedoms on account of their gender. This differentiates the oppression experienced by both men and women on account of, for example, class relations or ethnicity.

The theories on subordination and oppression explain why women tend to be poorer, less educated, and lower paid than men for the same job and have lower levels of political participation. The appropriate programmatic response, given this framework, should address not only the surface manifestations of inequality but the roots that sustain it (Kardam, 2005).

Figure 1. Double Subordination of Women

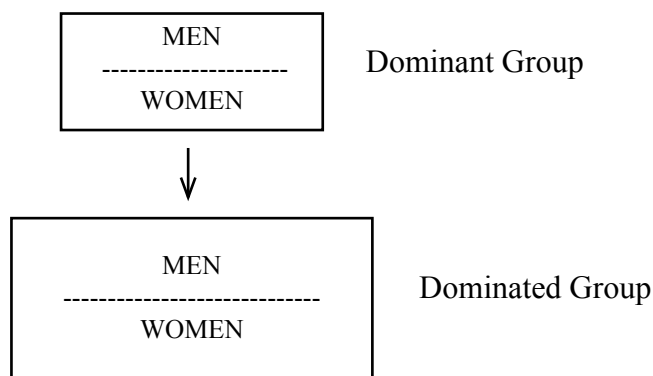


Figure 1 above illustrates the double subordination of poor women, who by virtue of their social class are dominated by the elite class as a whole at one level of subordination, and by men in their own social class, at the other level of subordination.

The ideology of patriarchy plays a big part in the persistence of gender inequality. Patriarchy is the ideology that is embedded in institutions, ways of thinking and relationships that explains and legitimates the allocation of more power, status and privilege to men than women (Warren, 2000).

Gender inequality is not natural – it did not emerge together with the evolution of humans from the apes. Its emergence is due to the appearance of a particular division of labour in society that later became institutionalized through the ideology of patriarchy. With an examination of the emergence of this particular division of labour, we can understand why gender inequality exists in most contemporary indigenous societies (Kelkar & Nathan, 1991). This last point will be more fully discussed in Section VI on the emergence of gender in society.

The extent and manifestations of gender inequality could be determined by other forces operating in society such as the influence of the market economy and factors such as social class,

culture and state policies, together with the quality of other freedoms in society. The five GenBenefit cases illustrate this point, which will be taken up more fully in sections VII and VIII of this report.

These specificities have to be considered when the aim is to enable vulnerable populations to protect their rights in benefit sharing because they may not only be vulnerable because of their poverty. For women especially, it could also be due to cultural factors that limit their capability to negotiate and decide on benefit sharing arrangements. What is needed could be “emancipatory informed and sensitive social-scientific research and action...built on the voices of women” (Slack et al., 2000, p. 2).

### *Definition of key terms*

Gender refers to socially constructed identities, roles, and status that influence the allocation of power, resources and opportunities in society between men and women.

The cognition and experience of a gendered social life could disadvantage both men and women. Two examples illustrate this. In refugee camps, men tend to become more despondent than women, and turn to alcohol and gambling. One explanation for this is that men are psychologically affected by their inability to live up to the social norm that they should be able to provide for and protect their families. Their negative behavior could therefore be a coping mechanism for a sense of failure (Alvarez-Castillo et al., 2004; Sen & Ostlin, 2007).

The other example is the gendered division of labour that marginalizes men from parenting and domestic chores, and disproportionately burdens women. In a rare research report on fatherhood and reproductive health, it was found that European men who are actively involved in parenting and in the domestic sphere tend to develop less negative behavior and have lower associated risks of untimely death and ill health (WHO, 2007). More knowledge on how gender roles negatively affect men is needed. This could perhaps reduce male resistance to advocacy for gender equality.

Gender inequality refers to imbalances in the distribution of benefits, resources, entitlements and opportunities as a result of (usually hierarchical) gender structures which create economic, social and political inequalities between men and women.

Definitions of political participation range between those that are so general they could mean almost anything to those that include only activities within the formal political system.<sup>4</sup> For this report, we define political participation as the involvement, representation or membership in community or public bodies and activities that make decisions on behalf of a collective.

### **GENDER INEQUALITY: ACHIEVEMENTS IN POLICY AND GAPS WITH REALITY**

There are two distinct realities about gender inequality today. On the one hand, important headway has been made, especially at the level of global policies; on the other hand, the human rights situation of millions of women remains dismal (Molyneux & Razavi, 2002).

#### **Policy and program reforms toward gender equality**

We are drawing attention to improvements in policy because these could be a source of opportunities for addressing gender inequalities in benefit sharing. We will discuss this in Section XII,

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<sup>4</sup> “A term to denote actions by which individuals take part in the political process” is a good example. See Axford, B., Browning, G.K., et al. (1997). *Politics: An Introduction*. London: Routledge, p. 109.

Recommendations.

The recognition that gender is a material issue in all areas of human development work is indicated in the substantive changes that have taken place in international policies and programs. Compared to the absence of gender concerns in the past, today we see global policies that have incorporated the gender question.

In both international public and civil society institutions the past two decades have been very productive in the area of policies and programs that address gender inequality. Led by the UN, major international policies have been crafted such as the Convention for the Elimination of Discrimination Against Women (1979), the recognition that women have political rights (1995), and ground breaking initiatives in biodiversity research and management (Swaminathan, 1999; IPGRI/FAO Working Group Meeting, 1996).

Table 1. Global improvements in narrowing the gender gap

Indicators	2006	2007
Educational attainment	91.55%	91.60%
Political empowerment	14.07%	14.15%
Economic participation	55.25%	57.30%
Health	96.25%	95.8%

International funding institutions such as the World Bank, governmental bodies like the European Commission and private NGOs are using part of their money to promote women’s health, welfare and empowerment especially in developing countries.

Following the global trend, several countries have put in place laws, institutions and mechanisms to tackle gender inequality and promote gender justice (King, 2001).

Measurements to monitor improvements in women’s political and economic participation (e.g. the Gender Empowerment Measure or GEM) and social situation (e.g. the Gender Development Index or GDI) have been developed for global application (World Economic Forum, 2007).<sup>5</sup> These measurements are used to monitor the accomplishments of the Millennium Development Goals where the promotion of gender equality and women’s empowerment is the third goal.

*Gains in gender equality*

There have been measurable improvements in gender equality across the world. These are seen for example in the narrowing of gender gaps in favor of women in education, political empowerment and economic participation based on averages of subindexes from 115 countries in 2006 and 2007.<sup>6</sup> In the 2006 and 2007 reports of the World Economic Forum, four Nordic countries namely

<sup>5</sup> There have been questions on the ability of the GDI indices to measure real gender inequality and on the quality of the data being used as basis for measurement. See, for example, Stanton, E. (2007). *Engendering Human Development: A Critique of the UNDP’s Gender-Related Development Index*. Massachusetts: Political Economy Research Institute University of Massachusetts Amherst. Or Anand, S. & Sen, A. (n.d.) *Gender Inequality in Human Development: Theories and Measurement*. Occasional Paper 19. Retrieved July 15, 2008, from [http://hdr.undp.org/en/reports/global/hdr1995/papers/sudhir\\_anand\\_amartya\\_sen.pdf](http://hdr.undp.org/en/reports/global/hdr1995/papers/sudhir_anand_amartya_sen.pdf)

<sup>6</sup> Global Gender Gap Index scores can be interpreted as the %age of the gap between women and men that has been

Sweden, Norway, Finland and Iceland have consistently been the top performers in narrowing the gender gaps. Table 1 above shows that except in health, the gender gaps have narrowed globally between 2006 and 2007 (World Economic Forum, 2007, para. 2).

What explains these positive developments? Foremost is the explosion in knowledge about gender and its impact on women's lives as well as advocacy for change by women themselves (Sen & Postlin, 2007). Solid evidence has been made available that clearly shows how the unfair treatment of women impacts negatively on social and economic development.

### *The situation for women is still dismal*

The other half of the reality regarding women's situation however is not as positive. This is especially true for poor women, who constitute the majority population in many developing countries.

Women make up nearly 70 percent of the world's 1.3 billion people living in poverty, 65 percent of the world's refugees and two-thirds of the world's illiterate population. They constitute two-thirds of the exploited informal workforce, own just one percent of the world's resources, and earn one-tenth of the world's income.<sup>7</sup>

Over half a million women die each year during pregnancy, delivery or shortly thereafter. Girls are twice as likely to die from malnutrition and preventable childhood diseases as boys, while almost twice as many women suffer from malnutrition as men. Women constitute less than one seventh of administrators and managers in developing countries, and hold only 15 percent of seats in the world's parliaments.

Among poor women, lack of political participation is the outcome not only of poverty but also of gendered division of labour between men and women, as well as women's own understanding of their place in the scheme of things. This is illustrated in the words of an Afghan woman.

I only attended our community meeting once because I am very busy and my husband is old and he is a shoemaker and I work at other people's houses (cleaning the house, laundry, baking the bread, etc). I do not have time to go to meetings; anyway they are discussing community issues, not household issues. (as cited in Swan, 2006, p. 5)

There is oftentimes over-utilization of women's time and under-utilization of men's time. Wom-

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closed. The Global Gender Gap Report 2007 is based on a new methodology that includes detailed profiles of the economic, legal and social aspects of the gender gap in each country. The Report measures the size of the gender gap in four critical areas of inequality between men and women:

- a) Economic participation and opportunity – outcomes on salaries, participation levels and access to high-skilled employment
- b) Educational attainment – outcomes on access to basic and higher level education
- c) Political empowerment – outcomes on representation in decision-making structures
- d) Health and survival – outcomes on life expectancy and sex ratio

One hundred percentage means that no gap exists. This means a high percentage, indicates greater progress in closing the gender gap.

The global averages do not however reflect important differences in the performance of individual countries.

<sup>7</sup> The data provided here on women's situation are from the Oxfam report. See full bibliographic details in References.

en's multiple burden in the household is often unrecognized in the community and even in the family. But even though women themselves may think that their correct place is in the home and not in the political sphere, data show that they do not believe that it is right for some people to dominate others (Swan, 2006).

Why does the situation of women remain dismal despite positive changes in policy? A key reason is that the roots of gender inequality are deeply embedded in society, and often go unrecognized. Furthermore, political commitment to tackle gender inequality remains very inadequate in many countries.

#### **EMERGENCE OF GENDER INEQUALITY IN SOCIETY**

When we speak about gender inequality, we don't speak only about women, but about unequal relationships between men and women. We are not claiming that men are in a good situation in poor and indigenous societies. But we are saying that women are worse off than men. Using this as a point for departure, let us now discuss whether such unequal relationships have existed throughout societal evolution.

There used to be two streams of scholarship about indigenous societies: traditional and revisionist. Traditionalists depict indigenous peoples living idyllic, peaceful lives; revisionists portray the impoverishment and abuse these people are suffering. Quite recently a third stream has emerged; the gender analysis of indigenous societies.<sup>8</sup>

A distinctive theme in the literature focusing on the gender question either in contemporary indigenous societies or the anthropological data of past societies is that the emergence of gender both as a concept and an institution is closely linked to the dominant mode of production and division of labour (Kelkar, 1991; Watanabe, 1968; Leacock, 2000)<sup>9</sup>. While there are contending views on whether or not indigenous societies of the past were egalitarian,<sup>10</sup> there is a common finding that in early societies where food gathering or horticulture was the main economic activity, both men and women worked together (Shanthi, 1999; Hitchcock et al., 2004). It was quite common for men and women to interchange their economic and social roles. Women, not only men, hunted (Slocum, 1975). Men, not only women, performed care giving roles (Hitchcock et al., 2004).

It has also been observed that societies tend to be egalitarian where division of labour is not fixed; the opposite has been observed regarding those where the division is rigid (Reiter, 2006).

Where hunting was the dominant economic activity (usually for big game) and the weapons for the hunt fell under the control of men, the economic division of labor was rigid: men hunted, women gathered and collected food (Kelkar & Nathan, 1991; Hitchcock et al., 2004).

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<sup>8</sup> For a good source on this intellectual stream, see Reiter, R. (1975). *Toward an Anthropology of Women*. New York: Monthly Review Press. Reprinted in Courtis, M., ed. (2006). *Taking Sides: Clashing Views on Controversial Issues in Physical Anthropology*. Portland: McGraw-Hill Dushkin.

<sup>9</sup> The emergence of a specific mode of production in early societies was influenced by the interactions of factors such as the natural environment, the food sources, climate, technology, population size, material culture, social organization, etc.

<sup>10</sup> For a good review of the literature on this point, see Courtis, M., ed. (2006). *Taking Sides: Clashing Views on Controversial Issues in Physical Anthropology*. Portland: McGraw-Hill Dushkin.

Food gathering was then considered of less value than hunting and women were considered to be dependent on men for the provision of food. When societies became sedentary, there was a further substantial loss in the autonomy and status of women (Reiter, 2006; Draper, 2001).

We illustrate this analysis with findings from India. Shanthi (1999) has observed that in tribal societies of the past which practiced shifting agriculture as their main mode of production (supported by hunting and food gathering), women’s social status was almost at par with men. There were no providers or dependents, as both men and women were equally recognized as providers.

When these indigenous societies in India changed from shifting to sedentary agriculture and ploughing became the central activity, Shanthi observed that this was carried out almost exclusively by men while women performed most other agricultural activities. Taboos against women touching the plough and roofing the house emerged, making women dependent on men for housing.

In many parts of the world the further development of gendered hierarchical systems in prefeudal and premarket societies was the handiwork of early colonialism by Eastern feudal empires and later Western colonialism by mercantilistic and capitalistic states. Colonialism hastened the dissolution of pre-gender cultural and social formations in many native societies.

Some scholars of contemporary indigenous societies believe that increased interaction with “outsiders” such as development workers, traders, state agencies and farmers has hastened the institutionalization of gendered hierarchies in indigenous societies (Felton & Becker, 2001).

Table 2 below summarizes the changes in the mode of production and the economic and social divisions of labour that explain the emergence of gender hierarchies in early societies.

Table 2. Emergence of Gender Inequality in Society

<b>Dominant Mode of Production</b>	<b>Economic Division of Labor</b>	<b>Social Division of Labor</b>
Food gathering – hunting, shifting cultivation, foraging-hunting	<ul style="list-style-type: none"> <li>• No fixed division of labor between men and women.</li> <li>• Women’s contribution valued equally as that of men.</li> </ul>	<ul style="list-style-type: none"> <li>• Social division of labor interchangeable (men had active participation in the child care and domestic sphere).</li> <li>• Women had autonomy.</li> <li>• Women had active participation in politics.</li> </ul>
Settled/sedentary agriculture; Underdeveloped capitalism/feudalistic	<ul style="list-style-type: none"> <li>• Fixed division of labor.</li> <li>• Dominance of men in production.</li> <li>• Women’s contribution less valued.</li> <li>• Control of men of farming tools (e.g. plough) and livestock.</li> </ul>	<ul style="list-style-type: none"> <li>• Women relegated to domestic sphere.</li> <li>• Men have no participation in domestic sphere.</li> <li>• Men monopolized political sphere.</li> <li>• Norms, taboos against women’s participation in politics</li> </ul>

The changes in the mode of production and the corollary changes in the economic and social divisions of labour did not take place as linear developments determined by one or two factors. Rather we should consider them in the context of the interactions of various factors including, but not limited to specific historical features of society. This explains the differences in features of gender inequality among indigenous societies.

The foregoing analysis frames the succeeding discussion of the gender question in the five cases.

### **GENDER CONCERNS IN THE KANI, SAN, NIGERIAN CASES**

A template for analyzing gender concerns in benefit sharing in research is provided in an earlier paper where three fundamental issues are identified: (a) gender issues in representation or participation in decision-making relative to the distribution and use of benefits; (b) control of or access to the benefits; and (c) representation or participation in the management of the benefits (Alvarez-Castillo & Feinholz, 2006).

Gender constructs, together with the inequalities which these create exist in all the five societies where the cases are located. However, there are variations in degree and manifestations of gendered inequalities. These variations are linked to differences in the socio-economic, cultural and political situation of each society. These variations in turn differentiate the gender concerns in benefit sharing in each of the cases. We therefore situate the gender issues in the five cases in the larger social matrix of the societies where these cases are located.

In this section of the report, we start the discussion with the cases involving benefit sharing regarding nonhuman biological material or traditional knowledge; the Kani, San and Nigerian cases. We then take up the cases involving benefit sharing in human biological materials; the Nairobi and Icelandic cases. In the following section, Section VIII, we will identify the concerns and barriers to fair benefit sharing due to gender in each of the cases as well as concerns and barriers common to all the cases.

#### *Kani Society*

##### **The Kani in Kerala<sup>11</sup>**

The southwestern state of Kerala gained international prominence in the 1970s-80s as an unusual success story in bringing dramatic improvements in the social and economic life of the people, especially the women. Kerala had a socialist state government at that time that launched a massive program of state subsidized welfare, distribution of land and education reforms. Outstanding achievements include a fertility rate at replacement level, India's lowest birthrate, lowest infant mortality, highest age of marriage and longest lifespan with a literacy rate over 90%. Women are largely educated and daughters are valued as much as sons in a country where female infanticide is a problem due to the social preference for sons (George, 1997). Cultural factors may also have contributed to this phenomenon. The tradition of valuing daughters as much as sons could be traced to the tradition of matrilineal inheritance in Kerala (Andrix, 2000). Kerala has the highest gender equality index for all states in India (UNDP India, n.d.).

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<sup>11</sup> The Indian government does not use the concept of indigenous peoples in the Constitution and laws. Instead it refers to them as tribals. For consistency with the UN Declaration on the Rights of Indigenous Peoples, we will be referring to the Kani as indigenous people or Adevasi, the Indian term for indigenous peoples.

The Kerala model was promoted to other developing country governments to follow. It has been cited by the WHO and other agencies as a model of good and responsive governance in health (Andrix, 2000). Therefore we need to situate the Kani people in the social map of Kerala because of the popular notion that gender inequality is not a major concern in this society.

### **The Kerala paradox<sup>12</sup>**

The Kerala model has been hotly debated. Apparently, there are population groups that have not benefited from the achievements of the state. Women in the lower castes, scheduled castes and the Adevasis (an Indian word for indigenous) are among those marginalized from these developments. In a study among women agricultural workers, it was found that women do not have information about reversible methods of contraception and have been reliant on sterilization, their wages are half of men's wages, they have very low knowledge about the existing trade union and low political participation due to lack of opportunities. Men don't help with domestic work, while most women experienced either physical or sexual abuse. Alcohol abuse by their husband is a major problem for the women (Gender and Development, n.d.).

### **Gender in Adevasi societies**

There is hardly any data about gender relations in Adevasi societies primarily due to a belief that unlike in caste society, Adevasi societies are egalitarian (UNDP India, n.d.). To a large extent this was true in pre-colonial Adevasi societies that were geographically isolated from Hindu dominated cultural systems. The modes of production, distribution, consumption and core values among the Indian Adevasis were generally similar. They were mostly shifting cultivators, horticulturists and food gatherers where both men and women had basically equal roles (Shanthi, 1999). Women had freedom to choose their life partners, to express their views about marriage or their fertility, and to participate in decision-making as equals of men. In political affairs, women had active participation (Shanthi, 1999).

But many of these traditions are now being replaced with the norms and practices of the caste society outside. While it may be true that despite variations in the status of women among Adevasi societies, the social status of indigenous women today is generally better compared to that of the caste women. Hierarchically gendered systems are definitely emerging in these societies (Xaxa, 2004). However, very little attention is being given to gender inequality in indigenous Indian societies (Shanthi, 1999).

Most Indian Adevasi societies do not allow women to take part in political organizations and meetings (Shanthi, 1999). The head of the community, members of the council of elders, village Panchayat, and tribal chief are all males. Only in a very few societies located in islands and in northeastern India are women allowed to participate in politics. Even in matrilineal Adevasi societies, there are taboos and beliefs against women becoming head of the village (Shanthi, 1999). Even after the law created the Panchayat Raj where definite seats have been assigned for women, including Adevasi women, cultural practices have obstructed the law's implementation regarding

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<sup>12</sup> 'Gender paradox' in Kerala refers to the 'contradiction' whereby women's high showing in socio-demographic indicators of development exists simultaneously with their low public participation and the increasing incidence of violence upon them. See Sreekumar, S. (2007). The land of gender paradox? Getting past the common sense of contemporary Kerala, *Inter-Asia Cultural Studies*, 8(1), 34-54.

women's political participation.<sup>13</sup>

### **Gender in Kani society**

Are there barriers to fair benefit sharing arising from gender in the Kani society? The Kani used to be shifting cultivators but are now settled communities. As discussed earlier, during the stage of shifting cultivation, there was no clear evidence of gendered hierarchies. However, primarily due to the forest use policies of the government, the Kani have been forced to adopt sedentary agriculture, supplemented by collection of forest products for exchange or sale, replacing the previous economic production for consumption. Kani egalitarianism is being eroded and gender hierarchy is emerging, not only due to changes in the mode of production but also due to increased interaction with mainstream Hindu society; this in a situation where the Kani did not have the autonomy to choose which influences to adopt. Since settled life only began about five decades ago, many egalitarian features continue to exist today (FAO Investment Centre, Socio-Economic and Production Systems Studies, 1998, p. 19) but specific elements of gender inequality are already in place (Xaxa, 2004). Some of these are indicated in the following:

*The marginalization of women in political activities.* This is consistent with the tradition in most Indian Adevasi societies where headship and membership in community leadership structures is the domain of men (Bhasin, 2007; FAO Investment Centre, Socio-Economic and Production Systems Studies, 1998, p.19).

*Gendered division of labour.* In a study of Kani women in Kerala, Menon found that pregnancy-related health problems of women are due to their back-breaking work and the loss of services of traditional midwives (Maruthuvathy) who are banned by the government from practicing their craft.

Traditionally as she went into labour, a woman performed all the normal household chores and social obligations. Fetching water for drinking and cooking from even far off springs, chopping firewood, taking care of children, cooking for the entire family, and even tending to the cattle and goats...Health workers and medical practitioners advise them more rest during prenatal and post natal period but since these women do not live in a joint family set up where they have the support of other women and as Kani men do not ordinarily share the household responsibilities, such advice is not often put into practice. (Menon, 1999, p. 216)

### *Lack of female autonomy regarding fertility.*

In a study of Adevasi societies in Kerala including the Kani, it was found that the abortion rate is high and about one quarter of the women did not use contraception because their husband did not want them to (Maria Rani Centre, n.d.). In contrast to pre-hierarchically gendered societies where women had the freedom to make decisions regarding their fertility, men in these societies appear to have control over their wife's fertility decisions.

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<sup>13</sup> For an analysis of the gender barriers on the implementation of the Panchayat Raj, see Mohanty, S. & Mohanty, N. Empowering elected women representatives of village panchayats: An urgent need. In Indira, R. & Behera, D. K., eds. (1999). *Gender and Society in India*. New Delhi: Manak Publications.

Table 3. Gender inequality in Kani society

<b>Changes in mode of production</b>	<b>Gender markers</b>
Change from hunting gathering to settled agriculture <ul style="list-style-type: none"> <li>• Centrality of economic production for the market</li> <li>• Emergence of economic differentiation between better off and worse off</li> </ul>	<ul style="list-style-type: none"> <li>• Women by tradition do not participate in political activities</li> <li>• Fixed (gendered) division of labor between men and women (men in public sphere; women in domestic sphere)</li> <li>• Women lack autonomy over their fertility</li> </ul>

**SAN SOCIETY**

For a very long time, the San in the Kalahari changed very little (Chennells, 2007). But land dispossession, colonization, and discrimination, especially in the past forty years, have brought unprecedented pressures on the San resulting in changes that are deep and far reaching (Hitchcock et al., 2001). Chennells (2007) describes the Kalahari San as a hunting-gathering society in transition who are unfamiliar with hierarchies and formal structures. A hierarchical gender structure is a recent construct in San societies. That is why some San women contest the claim that there is male supremacy in their society. In an interview with San women, it was found that to the women, “gender is not a material issue” (Hitchcock et al., 2001, p. 2).

After reviewing the literature on San societies from a gender perspective, Felton and Becker (2001) concluded that gender structures were institutionalized among the Kalahari San when they shifted from foraging–hunting societies to sedentary settlements. In the sedentarization phase of societal transformation, the economic division of labour changed, resulting primarily from the introduction of animal husbandry and men taking jobs on cattle ranches. Men acquired livestock and gained more control over these new economic resources. Previously, women’s economic contribution was valued equally with that of men; in this altered societal phase, women’s work was considered of lower value.

The gendered social division of labour became rigid. Men became less involved in child caring and household chores. Women’s autonomy and influence were eroded, exacerbated by loss of mobility in the fixed settlements and the emergence of economic differentiation between individuals.

The approach of external agents such as development workers and state agencies was to deal with men as the head of the household and this further weakened women’s economic and social status. For example, agreements were made with men; women were allotted small livestock (e.g, goats) while the men were given cattle on the assumption that they were the family heads (Sylvain, 2006).

While this pattern of change was observed among San societies across Southern Africa, there are differences between these societies in the extent and manifestation of gender inequality. This is due in part to differences in the relative durability of some elements of the previously egalitarian society and the extent of influence of the new. Nonetheless, all these societies are undergoing changes toward women having less power and autonomy than before (Hitchcock et al., 2004).

Among the men, there may be no pronounced hierarchy in political decision-making and

in class differentiation (Chennells, 2007). However between men and women, hierarchical changes in relationships have been significant. Men began to dominate the public domain and women’s participation in political affairs has dwindled (Sylvain, 2006).

Table 4. Gender inequality in San society

<b>Changes in mode of production</b>	<b>Gender markers</b>
From hunting-gathering to sedentary agriculture: <ul style="list-style-type: none"> <li>• Wage labor</li> <li>• Animal husbandry (men acquired livestock)</li> </ul>	<ul style="list-style-type: none"> <li>• Fixed (gendered) division of labor</li> <li>• Erosion of female autonomy</li> <li>• Women’s economic contribution less valued</li> <li>• Men’s wage labor and control of livestock more valued</li> <li>• Women marginalized in politics</li> </ul>

**NIGERIAN SOCIETY**

Nigeria is integrated into the global capitalist system but exhibits characteristics common to many developing countries in Africa. Its economy is mainly rural and land-based, with exports mostly of raw and semi-processed products. The level of industrialization is relatively low. Income inequality is very sharp. Poverty is high, with the greater bulk of the poor in rural areas. Most of the poor are women (UNDP, n.d.).

According to Okome (2002) while male dominance was built into the social system of some Nigerian ethnic groups in the pre-colonial period, women played a significant and vital role in most aspects of community life. Nonetheless, there was discrimination on the basis of both class and gender. Women who became decision-makers by virtue of their acquired or ascribed status were by no means treated in the same way as men in terms of their rights. Features of structural inequality could be observed in unequal access to and control of the means of production as well as in the ability to control reproduction. This is exemplified in the social stigma for wives who have no children.

Many laws against gender discrimination are not necessarily reflected in practice. For example, while women have the right to own property just like men, daughters cannot inherit property from their father (Qualls, n.d., para. 6). In the management of inheritance, women are not treated equally after the death of the (male) head of the family (Wambebe, personal communication, July 2008).

Women play a very minimal role in politics despite a constitutional guarantee for equal political rights (Qualls,n.d., para. 10; Okome, 2002).

Table 5. Gender inequality in Nigerian society

Mode of production and economic features	Gender markers
<ul style="list-style-type: none"> <li>• Capitalistic with features of feudalism especially in rural areas</li> <li>• High economic inequality</li> <li>• Massive poverty</li> <li>• Serious inadequacies in state services</li> </ul>	<ul style="list-style-type: none"> <li>• Women’s economic contribution not valued as much as men’s</li> <li>• Fixed (gendered) division of labor: women in domestic domain, men in public domain</li> <li>• Daughters cannot inherit from father</li> <li>• Lack of female autonomy over reproductive decisions</li> <li>• Women have minimal role in politics</li> <li>• Most of the poor are women</li> </ul>

**GENDER CONCERNS IN THE KENYAN AND ICELANDIC CASES**

We now turn to an analysis of underlying gender concerns in the two cases involving human biological materials. We then make a comparative analysis of the key gender issues in benefit sharing among the five cases.

*Kenyan Society*

Like Nigeria, Kenya has a semi-capitalist and semi-feudal economy. Industrial capitalism has not yet fully developed, with largely feudalistic land ownership in rural areas.

According to a government report in July 2000, the depth and extent of poverty and economic inequality are serious concerns in Kenya (Government of Kenya, 2000). The country ranks high among poor countries in income disparity. A huge percentage of the population does not have access to safe drinking water while millions cannot afford quality healthcare.

Healthcare services for HIV/AIDS face daunting challenges. A study conducted in three regions of the country reported an overwhelming unmet need for community awareness services on family planning, HIV/AIDS counseling, prevention of transmission of HIV from mother-to-child, and on breastfeeding for HIV+ mothers. The study found that participants believe that men must be directly involved, instead of the current strategy of concentrating on women only and expecting them to pass on the information to their partners (Gichuhi, 2004).

Similarly to the situation of women in Nigeria, Kenyan women constitute the majority of the poor, who in turn comprise more than half of the total population. Poverty is mostly a rural phenomenon. Subsistence farmers and pastoralists are among the poorest in society. Women are more vulnerable to poverty than men. Illustrative is the data that 69% of the active female population work as subsistence farmers compared to 43% of men. With this sector among the poorest of the poor, this dependence on subsistence farming explains the extreme vulnerability of rural women (Government of Kenya, 2000).

The disproportionate representation of women among the poor is not confined to rural areas. In urban areas there are more female-headed households in poverty than male-headed households (World Bank, 1996).

Many rural women migrate to the urban areas but remain poor. The greater proportion of women in poverty compared with men exists despite the fact that women have a greater burden of

work than men (World Bank, 1996).

Part of the reason for female poverty is the social bias in favor of sons for ownership and control of land. In a household survey reported by the World Bank, it was found that 60% said they would give all their land to their sons, while 8% said they would give more land to their sons than their daughters (World Bank, 1996).

From the same World Bank study, it was found that upon divorce or separation, many assets including land become the sole property of the man.

Table 6. Gender inequality in Kenyan society

<b>Mode of production and selected economic features</b>	<b>Gender markers</b>
<ul style="list-style-type: none"> <li>• Low level capitalist industrialization with rural feudalistic production</li> <li>• More than 50% of population poor, majority of whom are women</li> <li>• Sharp income inequality</li> </ul>	<ul style="list-style-type: none"> <li>• Economic assets solely owned by men after divorce, separation</li> <li>• Bias in favor of male heirs</li> <li>• Domestic work burden of women</li> <li>• Low social status of women</li> <li>• Men dominate political sphere</li> </ul>

*Icelandic society*

In contrast to Kenya, Iceland is a small country with a small population. It is a rich industrialized capitalist country in the Nordic region of Europe, a region that leads worldwide in HDI and GDI. In 2007 it was the 2nd highest in the world in terms of closing the gender gap. It had the highest level of performance in HDI for 2004 -2005. The GDP per capita is one of the highest in Europe. Literacy is universal (World Economic Forum, 2007). The people’s quality of life is one of the highest in the world (Haldorsson, 2003).

A few years ago Icelandic women had the longest global life expectancy (Haldorsson, 2003). There is governmental special emphasis on mother and child healthcare, with 9.5% of the Gross Domestic Income going to public healthcare. Maternal mortality is virtually nonexistent.

As early as 1973 the government enacted laws mandating equal pay for men and women for equal-value and comparative work. This has been followed by several legislations and programs that aimed to remove gender gaps in education, employment, opportunities and political rights (Einarsdottir & Krisjansdottir, 2002).

Women’s political organizing and activism date as far back as a century ago on issues such as livelihood and trade unionism (European Network of Adult Education Organizations Working on Women’s Employment Issues, 2004). In 1975, almost all the women took part in a nationwide strike, putting down their work in the office or at home, and going out to the streets. Instead of doing their daily work at home or at the job, the women gathered on town-squares and demanded to be heard. They were! The whole national machinery stopped. (Einarsdottir & Krisjansdottir, 2002, p. 1).

Liberal democracy has taken firm roots in Icelandic society with political freedoms both legally guaranteed and well established in practice.

However, there are remaining gender inequalities, among which are:

- Gender pay gap of 16% in 2001 in main city Reykjavik (Einarsdottir & Krisjansdottir, 2002);
- Percentage of women in Parliament: 30.2% in 2004 (UN Statistics Division Women in Parliamentary Seat Per Cent [IPU/MDG] Iceland, 2008).

In the spring elections of 2003 where gender equality was a major election issue (referred to by some observers as the “Icelandic feminist spring”) (Thorvaldsdottir, 2004), the electoral outcome ironically saw a reduction in women’s percentage in Parliament from 34.9% in 2000 to 30% in 2004. In public debates during the election campaign, there was under-representation of women in media talk shows and interviews, ranging from 24% in TV shows to 39% in radio programs (Thorvaldsdottir, 2004).

**COMPARISON OF CASES ON SELECTED INDICATORS**

When we combine selected data about the three non-indigenous societies where the cases examined by the GenBenefit project are located, we will see sharp contrasts as well as a disturbing pattern – in all three societies, regardless of marked differences in socioeconomic indicators, a common gender inequality marker is women’s political under-representation or unequal political participation, with differences in degree of severity.

Table 7. Comparison of selected indicators in 3 non-indigenous social settings: Nigeria, Kenya and Iceland

<b>Selected indicators</b>	<b>Iceland</b>	<b>Kenya</b>	<b>Nigeria</b>
% of Women in parliament	34.9 (2000) (UN Statistics Division) 30.2 (2004)	3.6 (2000) (UN Statistics Division) 7.10 (2004)	3 (1999) (UN Statistics Division) 7 (2008)
Maternal mortality rate (per 100,000 live births)	0 (2000) (WHO Mortality Country Fact Sheet Iceland, 2006)	1000 (2000) (WHO Africa 2006)	800 (2000) (WHO Africa 2006)
Life expectancy (2004)*	79 (men) (WHO 2006. Mortality country fact sheet. Iceland) 83 (women)	51 (men) (WHO 2006. Mortality country fact sheet. Kenya ) 50 (women)	45 (men) (WHO 2006. Mortality country fact sheet. Nigeria ) 46 (women)
HDI (2007/2008) (Human Development Reports, retrieved July 15, 2008)	High (ranked # 1)	Medium (ranked # 148)	Low (ranked # 158)

If we expand the comparison to include all five social settings in which the case studies are

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\* If their situation is basically similar, women will outlive men by 2-5 years due to women’s biological advantage. See Sen, A. (1990). More Than 100 Million Women are Missing. *The New York Review of Books*, 37(20).



national benefit sharing regulations regarding those who contribute human biological resources. Nevertheless, it is still notable that, according to Andanda and Cook Lucas, “routine issues of negotiation and decision-making related to the conduct of research studies only involved researchers and administrators from the relevant universities and institutions... There was no formal inclusion of representatives from the sex workers in any of the negotiations” (Andanda & Cook Lucas, 2007, p. 9).

In the Nigerian case, only Rev. Ogunyale, as the source of the traditional medical knowledge, was involved in the negotiations (Wambebe, 2007). Before he died he set up a Foundation to receive all his royalties from the benefit sharing agreement. This is despite the fact that most traditional medical practitioners are elderly women (Wambebe, personal communication, June 2008). It is reasonable to assume that they made a substantial contribution to the development of the traditional knowledge and technology that eventually resulted in the Niprisan drug for sickle cell anemia,

The Kani case is a good example of how gendered structures and practices in society impact women’s direct participation in benefit sharing. In Box 1 below is an abridged account of the Kani-Arogyappacha story.<sup>15</sup>

#### Box 1. The Women in the Kani-Arogyappacha Story

In 1987 the Mottu Kani (the head of the Kani tribe) deputized three Kani guides to accompany scientists from the Tropical Botanical Gardens and Research Institute (TBGRI) in their expedition in the forest. The scientists came to learn that chewing a particular plant gave the Kani guides vitality. The scientists persuaded the Kani tribe to provide them with more information about this plant.

Progress in scientific study of the plant was encouraging. Two of the guides were hired as consultants and paid fees from 1993-98. Technology resulting from the study was later transferred to a major Ayurvedic company in exchange for license and royalty fees. On its own initiative, TBGRI decided to share the fees with the Kani tribe. The Kerala Kani Community (Samudaya) Welfare (Kshema) Trust was registered in 1997 to regulate and direct the flow, management and use of the money. This function is vested in an Executive Committee of the Trust.

The first Executive Committee with nine members was appointed. Of the nine members, one was a woman. She participated in all activities and decision-making of the Committee.

When the term of the first Committee expired, an election was held in May 2008 to constitute the membership of the next Committee. There was no woman candidate although more than half of the community women went out to vote. Because there was no woman member, in its first meeting, the newly elected committee decided to appoint two women as members (Chaturvedi, personal communication, June 2008). All of the officers are men.

On the use of the money, aside from allocating for general community projects, according to a key informant, Rs. 5000 is maintained as a fixed deposit in the name of two young Kani girls whose mother was killed by a wild elephant in 2002. Financial assistance has also been given to the family of a woman who committed suicide during the year 2006. “Such kind of small benefits are being extended to the individuals/families as and when it is required.”<sup>16</sup>

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<sup>15</sup> Based on Chaturvedi, S. (2007). Kani Case: a Report for GenBenefit. Retrieved from [http://www.uclan.ac.uk/health/schools/school\\_of\\_nursing/research\\_projects/genbenefit.php](http://www.uclan.ac.uk/health/schools/school_of_nursing/research_projects/genbenefit.php).

<sup>16</sup> According to a key informant interviewed by Sachin Chaturvedi. Data were sent in a personal communication from Sachin Chaturvedi, June 2008.



Kani women at the voting center, May 2008<sup>17</sup>

How about the women? The Kani tribal head was a man; all the guides were men; all the officers of the Trust are men. In the context of the data about the Kani society presented earlier, it is not surprising that no woman would stand for election to the Executive Committee. The decision to appoint two women members was made by men on behalf of women.

Table 8. Women in bodies involved in benefit sharing decision making

	<b>Kani</b>	<b>San</b>	<b>Nigerian</b>	<b>Kenyan</b>	<b>Iceland</b>
Number of women in key decision making bodies	2/11 (Kani Trust Executive Committee)	2/7 (San trustees) WIMSA (no woman officer during negotiations)	None	None	One quarter of Parliament members

*Numbers matter*

It has been argued elsewhere that the number of women in decision-making bodies is not always a reliable indicator of the quality of women’s political participation. A more reliable indicator is whether or not their political presence has an impact on the decisions made (Alvarez-Castillo, Cook Lucas & Castillo, 2009).

However, given the social context of these five cases, where women are less equal than men, numbers do matter. A lone woman in a committee can have significant influence on decisions made if she is in a social setting characterized by a living tradition of gender equality in politics or when she wields significant power. But women in very small minorities in committees, in social settings like that of the Kani, San, Nigerian and Kenyan cases, would be facing tremendous odds in trying to have their views listened to and seriously considered. The women themselves may not even dare to speak their mind at all in meetings.

The San had to learn the western method of political decision-making when they fought for their right to land and later when they negotiated with external parties regarding the Hoodia.

<sup>17</sup> Photo courtesy of Sachin Chaturvedi.

WIMSA was established and played a central role in the negotiations and decision-making on behalf of the San communities in Southern Africa. To WIMSA's credit, it conducted discussions with both men and women representatives from the San communities about human rights, gender equality, intellectual property rights, access to natural resources and other key issues (Haraseb, personal communication, July 2008).

However, during meetings, due to cultural practice, "women did not talk openly since they were supposed to listen only." In most instances, "they were shy to talk in front of many people." (Haraseb, personal communication, July 2008).

### *Gender fairness in the control and distribution of benefits*

The other key issue we find in all the cases except for Iceland is that of women's access to, or fair share in, the distribution of benefits.

In the Nigerian case, women traditional health practitioners were not present at all in negotiations and decision-making, including in the signing of the memorandum of understanding. However, when viewed in the larger context of Nigerian society, where women are discriminated against in inheritance and in the management of property, we need to ask whether these women, who most probably contributed to the development of the traditional knowledge about sickle cell anemia treatment, would have been fairly treated in the distribution and use of the funds in the Foundation, even if they had formally been included?

The Majengo sex workers have no right to ownership of any knowledge that will be generated by research which uses their blood and other samples, and no right to take part in negotiations on subsequent developments of the study (Andanda & Cook Lucas, 2007).

In the Kani case, women-specific allocation of the Trust money has been for the children of (dead) women. Had there been more adequate representation of women in the Executive Committee of the Trust, would their needs, such as reproductive healthcare, have been provided for? We are not sure. It could be that even if asked, the women themselves would not think first of their own specific needs but those of their children and family.<sup>18</sup> However it is quite certain that through inclusion they would have a greater chance of experiencing and learning about political participation, and about how political decision-making can be a vehicle for articulating and addressing their needs.

### **CONCLUSIONS: LESSONS LEARNED**

We have shown the usefulness of a culturally and historically specific analysis from a feminist perspective in recognizing and understanding issues of fairness in benefit sharing that arise from gender. By placing the cases within their larger social and historical context, the features of gender inequality as this impacts benefit sharing in each case have become clear.

Context differentiates the manifestations of gender inequality in benefit sharing. We see that in societies characterized by very low female political participation, high poverty incidence and lack of control of economic assets among women, their direct participation in negotiations and decision-making regarding benefit sharing is minimal. By contrast, in a society like Iceland,

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<sup>18</sup> For an explanation on why women themselves do not as a matter of course seek political office and why they themselves would not think of their own specific needs when it comes to allocating funds, see Alvarez Castillo & Feinholz (2006) and Alvarez Castillo, Cook Lucas & Castillo (2009).

although the political gender gap exists as indicated in women's membership of Parliament and participation in public debates over the deCode project, there was a greater degree of women's direct involvement compared to the other cases.

Male dominance of the political domain is of a higher degree in the San, Kani, Nigerian and Kenyan settings compared to Iceland which in turn is reflected in either the minority position of women in decision-making bodies or their exclusion from direct participation in decision-making. Women's silence during meetings as exemplified in the San case is another facet of male political dominance in benefit sharing processes.

It is clear that in all the cases, the most significant and common barrier to women getting fair treatment in benefit sharing is their marginalization in decision making. This is consistent with the global gender gap data presented in Table 1, page 9, earlier where the highest gap is in political participation, followed by economic participation.

We can assume that men (like the San men), who continue to be influenced by their long history of egalitarianism, will think of the best interests of everybody in the community and are fair in making decisions (as the data about WIMSA seem to indicate in Chennells' account). However, given the evidence that the transformation of heretofore ungendered societies to gendered societies had differentiated impact for women and men (explained in the theories on difference and subordination), even the best intentioned men cannot represent the reality of women's lives. Additionally, women have equal political rights to representation and participation (as discussed in Section V) the good intentions of men notwithstanding.

Women's marginalization from decision-making in each case took place regardless of the significant differences between the socio-economic and political status of the societies where the cases are located. This could be due to the fact that all the cases are located in societies where basic structures of gender inequality exist. It is interesting that we did not find any significant differences in issues of fairness in benefit sharing arising from gender between the human and non-human resources cases.

"A feminist perspective on research ethics calls for directing our attention to features of the social and institutional context related to the research enterprise, including contextual features that may perpetuate patterns of inequality or power imbalances." Examples cited are "'norms and unquestioned assumptions in science and society, economic structures and processes of decision making that structure research with humans that could compromise ethical ideals of social equality and self-determination'" (Eckenweiller et al., 2008, p. 162).

There are however some substantial differences between some of the issues raised. Concerns about privacy and confidentiality are found in the human cases but not in the non-human ones, and these could negatively impact both men and women regardless of their gender. Privacy and confidentiality concerns pose increased risks of harm to the Majengo sex workers, given that commercial sex work is illegal and stigmatized in Kenya.<sup>19</sup> If risk is a material consideration in the

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<sup>19</sup> This danger has been recognized by UNAIDS, The Joint United Nations Programme on HIV/AIDS (UNAIDS) – Ethical Considerations in HIV Preventive Vaccine Research, notes to Guidance Point 7 and 13. Retrieved September 15, 2008, from <http://iavi.info/file.cfm?fid=171>. See discussion in Andanda & Cook Lucas, p. 19.

distribution of benefits, then the risk being taken by the women sex workers should be weighed into the allocation of benefits among the parties. This becomes, additionally, a gender issue, when all of the participants in the study are female.

While the barriers to fair benefit sharing arising from gender are of major concern, there is a need to recognize as well the opportunities within society, in national and in international policies that can be potentially mobilized as resources to address the specific barriers raised in the case analysis. In the following section, we propose specific policy guidelines and strategies to minimize the barriers and maximize the opportunities to ensure that women's equal political and economic rights are protected in benefit sharing.

### **RECOMMENDATIONS FOR MOVING FORWARD**

International ethical guidelines on research complemented by international policies and programmes that promote gender equality can provide the moral and legal ground for fairness in benefit sharing not only between the sources and users of the biological materials and traditional knowledge but also between men and women.<sup>20</sup> However, we should recognize the gaps between policy intentions and reality. One reason for these gaps is the shortfall in national implementation of globally accepted policies.

International guidelines and policies can only change reality on the ground if governments and other local stakeholders seriously and consistently create the necessary mechanisms in laws, institutions and programs. Despite variations in accomplishments in the social settings of the five cases, the existence of legislation for gender equality in all the countries where the cases are located provides the legal framework for advocacy that benefit sharing processes should ensure that women's political and economic rights are respected.

These rights are mirrored by the well-established responsibilities of researchers. With regard to medical research for example, the Declaration of Helsinki states that, "Research Investigators should be aware of the ethical, legal and regulatory requirements for research on human subjects in their own countries as well as applicable international requirements." (World Medical Association, 2008, para. 9). This includes by default all legal and regulatory requirements, even where these are not being actively or effectively implemented on the ground, as discussed earlier. Given the emphasis in the Declaration of Helsinki on the primacy of its protections, "No national ethical, legal or regulatory requirement should be allowed to reduce or eliminate any of the protections for human subjects set forth in this Declaration.", a strong case can also be made that (in a setting where women's rights are threatened), researchers also have a responsibility to address the requirements of international guidelines regarding women's rights, in the same way as they would ethical requirements..

Therefore we need a conscious effort by researchers to recognize and address in appropriate ways those inequalities in localities that obstruct the implementation of policy. For fairness in benefit sharing in research, context is important. This means grounding our approaches on the realities of localities, groups and individuals who are vulnerable to exploitation. According to a

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<sup>20</sup> This is despite the recognized gender blindness of many international ethical guidelines and instruments. See Alvarez Castillo & Feinholz (2006) and Eckenweiller, E., Feinholz, D., et al. (2008). The Declaration of Helsinki thru a feminist lens. *The International Journal of Feminist Approaches to Bioethics* 2008, 1(1), 161-177.

recent paper.

Such an approach would also inevitably impact on the work of research ethics committees although, arguably, their role broadly construed, already includes these responsibilities. Recent suggestions that ethical review committees “should include representatives from the population from which the subjects will be recruited or at least include reviewers who can represent their interests” (Eckenweiller et al., 2008, p. 162) resonate with our own earlier discussions about the importance of women’s representation in decision-making fora.

The case analysis has shown that non-recognition of gender inequality in communities and its impact on fair benefit sharing among even well-intentioned actors (both community leaders and external actors) has created major barriers for women’s equal participation and access to benefits. A broad algorithm that may be formulated for benefit sharing should explicitly require women’s meaningful participation in all phases of decision-making, starting (as much as possible) with the formulation of the research design through to the signing of agreements and the allocation of benefits with minimum, appropriate and measurable indicators. The definition of meaningful participation should be contextualized in but not bound by cultural, social, political and economic practices and relationships. This is because these practices and relationships could be the sources of inequality and women’s exclusion as shown in the case analysis.

This could however create a dilemma. When women themselves do not see gender inequality as a material issue, or where women themselves do not see the need for their active participation in political activities, should researchers or external actors insist on taking up the issues?

Victoria Haraseb has suggested that women ought to be asked about this.<sup>21</sup> In other words the appropriate strategy is to engage with the women, starting from where they are (including their consciousness) and not where the researchers are coming from, thus avoiding the imposition of the Western gender perspective at the outset.<sup>22</sup> This means that giving women space to talk and think is a requisite starting point. This is a feature of an empowering strategy. Starting with an a priori checklist for informed consent which has been drawn up by the researcher based on the requirements of an ethics review committee, or by the sponsor of the research, could actually stifle women’s voices, and fail to elicit crucial information about their situation which might obstruct their free and prior informed consent in decision-making. It is imperative that a dialogic process with women be conducted, the outcome of which ought to be incorporated in the informed consent negotiations. Benefit sharing issues should be taken up as early as the prior informed consent negotiations.

These processes involve decision-making and participation. In settings such as these five cases, where men dominate negotiation or decision-making bodies, or where women tend to be silent in meetings/discussions where the majority are men, as in the San, Kani, Nigerian and

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<sup>21</sup> This is in relation to skills building needs of San women. Personal communication, July 2008.

<sup>22</sup> For a reflective example of how American researchers “jumped to conclusions about gender inequality”, by failing to see the whole process, or understand the indigenous context, see Simonelli, J. & Earle, D. (2003). Meeting resistance: Autonomy, Development, and “Informed Permission” in Chiapas, Mexico. *Qualitative Inquiry* 2003, 9; 74, 74-89.

Kenyan<sup>23</sup> cases, we need to be creative with strategies that can ensure women's effective political participation. We outline at least three:

1. Aim for women's equal membership of bodies that negotiate or make decisions.
2. Set up negotiation/decision-making bodies for women members only, if women prefer this.
3. Hold consultations separately for women, feed back the outcome to the negotiation/decision-making body, and ensure that women's views become part of the agenda and are a basis of decisions made.

#### *Women's equal membership in decision-making bodies*

There could be problems with insisting upon this strategy. Equal representation is a fundamental principle in West-derived liberal democratic governance systems, but could be experienced as an externally imposed practice in societies like that of the San or the Kani, as shown in the earlier discussion. These societies have their own (democratic) ways of conducting consultations and arriving at decisions. The problem, however, is that women may have less participation and influence over the decisions made – an inequality that arises from gender. We therefore suggest that equal representation should be actively expected and considered, when interacting with such decision-making bodies, and that those negotiating with them should assess the issues of gender equality, subject to local conditions but in the overall context of equal representation as a right. If those seeking agreement regarding benefit sharing are negotiating with obviously unequally representative decision-making bodies, then there should be some reflection and explanation for this, based on some dialogic process, in order to render the resulting consent process valid and transparent.

Simply putting women in these bodies would not necessarily result in their active participation and influence on the outcome and may even make the real situation worse. This is because as shown, the women may tend to be quiet, with the men continuing to drive the process from behind a screen of equal representation.

It will be useful for future research to examine how the gender perspective would affect the outcome of negotiations and the sharing of benefits (IUCN, 2007).

#### *Separate bodies for women*

Another strategy is to set up a separate body for women only. This is an attractive strategy because women may feel more in control of the process. This is illustrated by the Mangyan, an indigenous people in the Philippines.<sup>24</sup>

When asked if men and women are equally capable of leadership in the community, all the women in the focus group discussion said no. According to them, women are less capable than

<sup>23</sup> The Kenyan Majengo case is unique in that it only involves women. In principle this should make the question of women's participation in decision-making and benefit sharing simpler. However, given the traditional nature of the scientific research project, the participants were never involved in its design, and seem to have no rights to share in any benefits, however contrary to natural justice this may seem.

<sup>24</sup> Data from the fieldwork on indigenous ethics by Alvarez Castillo, F. July-August 2008. This Mangyan community, like the Kani and San, used to be a foraging-hunting society but is now a settled community engaged in planting crops for consumption and the market, gathering some fruits and leaves in the forest and occasional hunting for small game.

men, thus community leadership should be left to men.

A feminist response to this would be that women in all patriarchal societies often internalize their subordinate status, both as a result of socialization and because of the continuing power of patriarchal structures in society. Writing of the gendered post-colonial changes among the San people, Becker (2003, p. 16) says that, “These developments were not merely of a structural nature. They were incorporated in San male and female identities”. Philosopher Robin S Dillon (1997, p. 244) describes how this internalization of patriarchal norms “begins long before we are capable of exercising agency, and it shapes and delimits our agentic capacities.”

This is echoed by the Mangyan women, who when asked why women are less capable than men, reasoned that unlike the men, women have no knowledge and skills in regard to matters of solving community problems and making decisions on behalf of the community. They said this is because unlike the men, women have no experience in these matters.

This is why women would often rather keep away from community assemblies or decision-making bodies. However, when asked if they would participate and air their views if women only meetings were held, all of the Mangyan women said yes, the reason being that they would feel less shy making foolish remarks or mistakes. This acknowledged lack of confidence and experience resonates with the experienced suggestions of San representative Victoria Haraseb, who points out that “certain skills are needed before a San woman joins the mainstream, to talk about issues openly” and that a lot of skills development needs to be done. She suggests that the women themselves are best placed to “express themselves and say what type of training they need” (personal communication, July 2008).

#### *Separate consultations with women*

This strategy could be pursued in combination with the first or second strategy, but as a stand-alone strategy it could fail to ensure that women’s views are able to influence decision outcomes and even collude with their exclusion from significant parts of the process. If undertaken in combination with the two other strategies however, this could enhance opportunities for women’s participation and representation.

Why should these special protections be put in place in benefit sharing (and perhaps in other aspects of research)? For women, to recognize their gendered selves and represent themselves in decision-making on benefit sharing in the exercise of their agency is not a simple, linear process. The interconnectedness of social structures, subjectivity and context makes this a difficult, complex enterprise. Ethical guidelines that seek to protect women’s rights in benefit sharing, while morally compelling, will not be sufficient in bringing this about. Corollary efforts for building women’s agentic capacities by various sectors, especially the women themselves, are necessary for any such guidelines’ objectives to be achieved.

We should consider here that in terms of public health and risk, when we want to keep the most vulnerable community members safe, perhaps from exposure to a pollutant, (babies, pregnant women, those with compromised immunity), we set our ‘safe exposure’ limits high to ensure no-one slips through the net – regardless of whether this offers ‘too much’ protection to the hardier amongst us, who might be able to tolerate a higher dose. We should take the same approach with regard to benefit sharing by setting our standards high in order to ensure that those who need most protection from the risk of exploitation receive it.

## **SUMMARY OF RECOMMENDATIONS**

A fundamental principle in international policies regarding women is the protection of their political and economic rights. The guidelines that should be formulated to minimize barriers to fair benefit sharing arising from gender should be drawn from existing national and international policies as well as research ethics guidelines, with the aim of maximizing their implementation in local contexts. It is important to remember that every one of us has responsibilities in this regard. Because contextual factors impact policy implementation, the guidelines that should be formulated on benefit sharing should also recognize contextual factors that could obstruct or facilitate protection of women's political and economic rights. There should be the recognition of women's subordinated situation to address the impact of this on their capability and freedom to participate in negotiations and decision-making regarding benefit sharing as equals of men.

Capability-building measures for local ethics committees will be essential as part of this work, as this cannot be achieved without attention to oversight and governance structures. Policymakers and research funders may be willing to support and facilitate this work as it would assist them to meet their own goals.

An algorithm that describes the process, participants and expected outcomes could be drawn up to serve as a guide to researchers, communities, development workers, sponsors of research and other actors in benefit sharing in research. In the algorithm, women's rights to equal participation and their rights to access and control of economic benefits should be clearly indicated. Approaches that provide women the avenues and ensure their freedom to think, speak their mind and gain political experience should be developed. Imposing externally developed perspectives such as the feminist perspective, even though well-intentioned, should be avoided. Rather, researchers should start with the women themselves, including their consciousness and the constraints they live with in their daily lives, enabling women to recognize their own objective situation and from that develop their own agency. There are many examples of how this approach has been successfully carried out in transforming women to act as agents of their own destiny.

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