The Gender Dimension

by Royal Frederick Kastens and Christine Nelima Okhoya

The connection between women and achieving the world's Millennium Development Goals should not be underestimated.

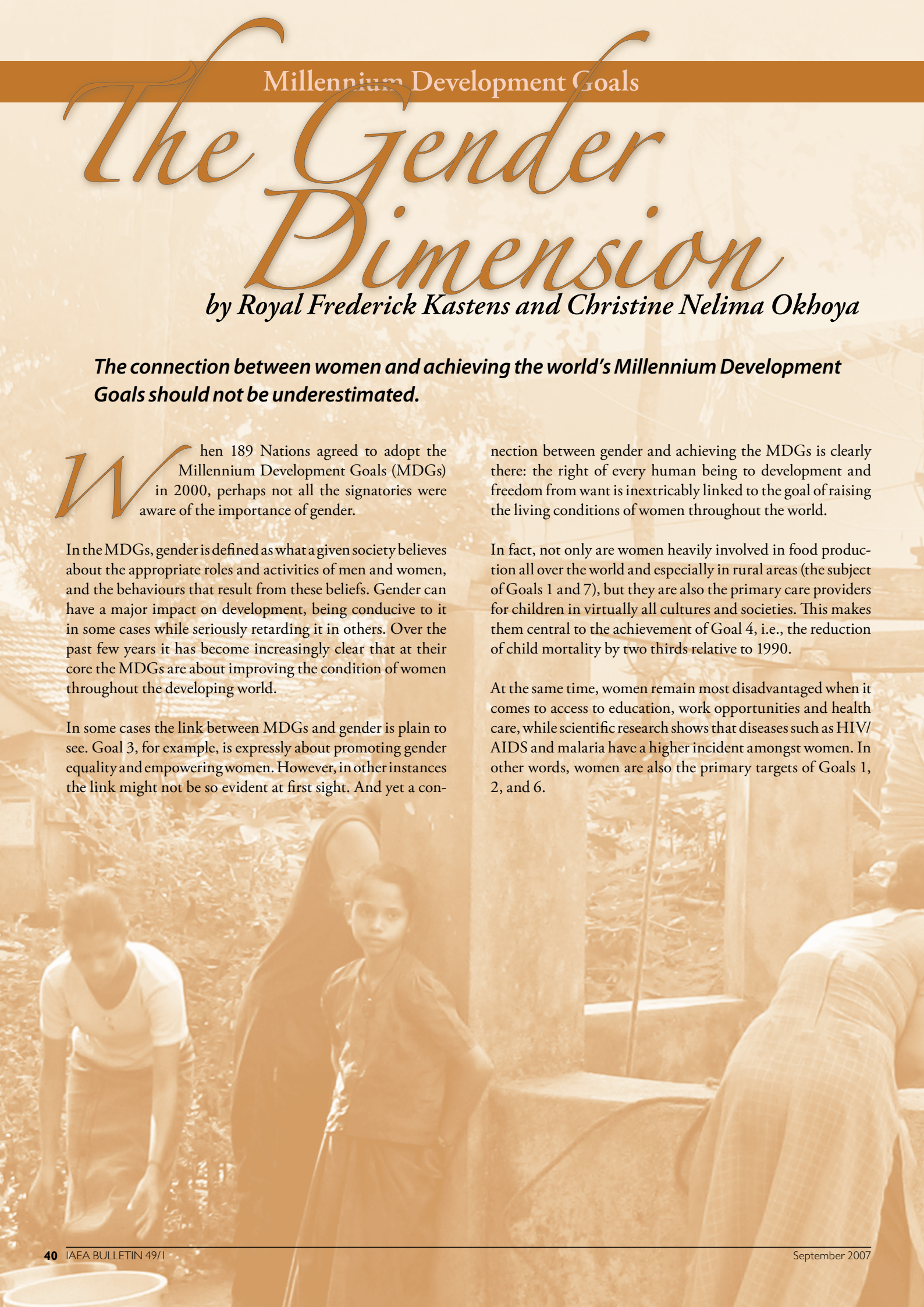
When 189 Nations agreed to adopt the Millennium Development Goals (MDGs) in 2000, perhaps not all the signatories were aware of the importance of gender.

In the MDGs, gender is defined as what a given society believes about the appropriate roles and activities of men and women, and the behaviours that result from these beliefs. Gender can have a major impact on development, being conducive to it in some cases while seriously retarding it in others. Over the past few years it has become increasingly clear that at their core the MDGs are about improving the condition of women throughout the developing world.

In some cases the link between MDGs and gender is plain to see. Goal 3, for example, is expressly about promoting gender equality and empowering women. However, in other instances the link might not be so evident at first sight. And yet a connection between gender and achieving the MDGs is clearly there: the right of every human being to development and freedom from want is inextricably linked to the goal of raising the living conditions of women throughout the world.

In fact, not only are women heavily involved in food production all over the world and especially in rural areas (the subject of Goals 1 and 7), but they are also the primary care providers for children in virtually all cultures and societies. This makes them central to the achievement of Goal 4, i.e., the reduction of child mortality by two thirds relative to 1990.

At the same time, women remain most disadvantaged when it comes to access to education, work opportunities and health care, while scientific research shows that diseases such as HIV/AIDS and malaria have a higher incident amongst women. In other words, women are also the primary targets of Goals 1, 2, and 6.



The eight MDGs established an ambitious, yet most urgent, agenda with quantitative targets set for the year 2015. But is the global community on track to meet these targets? In his foreword to the 'The Millennium Development Goals Report 2006', José Antonio Campo, UN Under-Secretary-General for Economic and Social Affairs, stated that the challenges the MDGs represent are staggering, but that there are clear signs of hope. However, he also warned that a lot remains to be done. "There is still a long way to go to keep our promises to current and future generations," he wrote.

But how will these promises be kept? How can the MDGs be achieved by 2015? Clearly, a lot needs to be done in terms of establishing better governance, eliminating poverty pockets within societies and fighting what experts define as 'poverty traps' — i.e., the fact that poor people are simply too poor to carry out the investments needed to overcome hunger, disease and inadequate infrastructure.

However, if the problems highlighted in the MDGs are to be overcome, science and technology also need to come into play. In 2005, Jeffrey D. Sachs and John W. McArthur, wrote that mobilizing science and technology would play a pivotal part in the achievement of the targets set by the MDGs: "Advances in science and technology allow society to mobilise new sources of energy and materials, fight disease, produce crops, assemble and disseminate information, transport people and goods with greater speed and safety, restrict family size as desired, and much more."

The IAEA is at the frontline in the fight against poverty, being directly involved in the development of technologies that help improve the quality of life of millions of people around the globe. The IAEA is actively transferring life-saving science to developing countries that may not have access to state-of-the-art technologies otherwise. As an institution the IAEA is aware of the 'gender dimension' to the MDGs, and several of its projects are helping reach these goals by improving, directly and indirectly, women's quality of life.

Nuclear science and technology: helping to realize the MDGs

The IAEA contributes directly to the MDGs by delivering technical and cooperation programmes that support national targets that are in-line with each goal. By linking science and technology to important development goals, the IAEA helps its Member States achieve sustainable and equitable development and contribute to global public good and well-being.

Goal 1: Eradicate extreme poverty and hunger

Women are responsible for half of the world's food production and produce between 60% and 80% of the food in rural areas in most developing countries. Yet farmers are still generally perceived as 'males' by policy-makers, development planners and agricultural service deliverers. For this reason, women find it more difficult than men to gain access to valuable resources such as land, credit and agricultural inputs, technology, extension, training and services that would enhance their production capacity. As primary care-givers, the empowerment of women is key to raising levels of nutrition and enhancing the well-being of family members, communities and the world's poorer populations.

The IAEA is active in the fight to reduce poverty and eradicate hunger. Through its Joint Programme with the Food and Agriculture Organization (FAO), it is working to increase agricultural production through better soil management, reduced spoilage of agricultural products, improved animal health and production, pest control, and reduced dependence on chemical pesticides that pollute food and the environment.

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Photo: Ritu Kenn/IAEA

Food security is increased through plant breeding of better crop varieties that are more resistant to disease and environmental stress. The IAEA also seeks to improve the nutritional status of populations through the analysis of nutrient requirements of different segments of society and the assessment of the effectiveness of food fortification programmes.

Through various training modalities, including fellowship programmes, scientific visits and internships, the IAEA is providing women with greater opportunities to become engaged in the field of nuclear science and technology.

Photo: D.Calma/IAEA

Goal 2: Achieve universal primary education

The IAEA contributes indirectly but substantively to the quality and diversity of primary education by elevating the status of physical science in the curriculum and providing opportunities for those studying basic science to continue learning through advanced and degree-based study. The IAEA supports over 1400 scientific and technical fellowships each year.

Goal 3: Promote gender equality and empower women

The increased involvement of women in management and decision-making processes within the scientific community is already having an impact on the science and technology (S&T) environment. However, a continued shift in culture and values, and a more equitable allocation of resources, would enable both women and men to have a greater influence on the S&T agenda as well as help re-establishing research priorities that take women issues into account.

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Goal 4: Reduce child mortality

Many children die before reaching age five due to several causes, including pneumonia, diarrhoea, measles, malaria and neonatal diseases. A contributing factor, malnutrition, is associated with 54% of these deaths. The incidence of certain diseases in women, particularly during pregnancy, can lead to underweight and premature babies with diminished chances of survival. Therefore, targeted efforts to reduce these diseases would have the additional benefit of reducing child mortality.

The IAEA is helping to set up guidelines on nutrient intake and utilisation, measuring body composition, energy expenditure and breast milk intake in order to safeguard the well-being of children.

Goal 5: Improve maternal health

Poverty, unequal power relationships and lack of education hamper millions of women accessing health care. When experienced during pregnancy, diseases such as malaria, anaemia and hepatitis can contribute to maternal mortality, and targeted efforts to reduce the incidence of these diseases in women could contribute to reduced maternal mortality rates.

In addition, the incidence of certain diseases varies with gender. For example, while the five most common cancers amongst women are breast, lung, stomach, colorectal and cervical, those for men are lung, stomach, liver, colorectal and oesophagus — an important consideration for any health care strategy focusing on cancer management.

By building capacity in molecular detection methods, the IAEA is strengthening Member States' decision-making tools to better manage life-threatening diseases like dengue, tuberculosis, malaria and HIV/AIDS. Additionally, the IAEA is working actively through its Programme of Action for Cancer Therapy (PACT) to promote the use of radiotherapy, a cost-effective treatment for cancer.

Goal 6: Combat HIV-AIDS, malaria and other diseases

According to scientific evidence, HIV prevalence trends indicate that the disease is spreading fastest among women, who are often physically, socially and economically more vulnerable than men. Besides, in most developing countries women and girls bear the brunt of caring to those diagnosed as HIV positive. Furthermore, the stigma of HIV may be felt most strongly by women.

The IAEA is collaborating with the World Health Organization (WHO) and UNAIDS in the use of molecular techniques to monitor HIV/AIDS, malaria, tuberculosis and related problems.

Pregnant women and young children have the highest incidences and mortality rates for malaria, and thus warrant specific attention in malaria-control programs. It is also possible that so-called 'gender norms' may affect malaria prevention and treatment through their influence on sleeping and work patterns, use of bed-nets and deciding which family members are given priority to or receive medicines and medical care.

Worldwide, TB prevalence and latent TB infection rates are generally higher among adult men than women, but TB remains a leading cause of death among women of reproductive age. Concerns exist that gender differentials in TB case detection and treatment outcomes may be due to a variety of factors such as differences in the reporting of respiratory morbidity, gender-distinctive barriers to access and, once again, stigma.

Goal 7: Ensure environmental sustainability

Women in developing countries are heavily dependent on environmental resources for meeting their living needs, and their daily endeavour could be made easier with technological innovations. Making available fuel sources that replace wood, for example, would have a particularly positive effect on the health of women as well as being beneficial for the environment. It would reduce both women's exposure to damaging fumes and alleviate the burden that they currently bear for collecting combustible material. The time saved may open up opportunities for education, particularly for girls, and income-generating activities for older women. This may help break a vicious cycle where solid fuel use restricts economic development, while poverty reduces the ability to switch to cleaner fuels.

Drought, floods and other extreme weather phenomena resulting from increasing greenhouse gas (GHG) emissions are felt the most in the developing world, where women have a difficult task meeting their nutritional needs and those of their families in a deteriorating environment.

The IAEA supports Member States in enhancing their capacity to carry out analysis and assessments regarding electricity and energy system development, energy investment planning and energy-environment policy formulation which include the nuclear power option.

Although there is no reason to believe that there are gender differences in access to water resources or sanitation (since these are generally provided to communities rather than individuals), improving the access to water supplies of a community can have a number of beneficial effects for women. It can lead to a general improvement in the health of a population and reduce the burden of fetching water to the home that often rests on girls and women within developing communities.

The IAEA has been extremely active in the development and refinement of tools used in water resource management. It has demonstrated the importance of analytical techniques in identifying and monitoring air and water pollutants, and it has promoted the wider use of isotope hydrology for water resources development and management. This technique can provide invaluable information on groundwater resources, leakages in dams and irrigation channels, as well as help establish the dynamics of lakes, reservoirs and coastal water. It can also help assess river discharge measurements, flow and sedimentation rates.

Goal 8: A global partnership for development

The IAEA works to build partnerships between national scientific and technical institutions and national development authorities as part of its inherent mandate. The partnerships that emerge enable Member States to build capabilities and capacities to meet the challenges of development using indigenous and sustainable national resources.

Women and Progress

It is increasingly clear that achieving the ambitious targets underlying the MDGs remains closely linked to raising the living condition of millions of women. As mothers, primary care-givers, scientists, leaders and housewives, women from around the world play a role in society that cannot be underestimated. Improving their quality of life is a moral imperative that cannot be escaped. Through its technical cooperation and related programmes, the IAEA is doing its share to help build a society that is more equitable not just for women but for all of mankind.

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