



WHEC Update

Briefing of worldwide activity of the Women's Health and Education Center (WHEC)

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Practice & Policy

Happy New Year from all of us @ the Women's Health and Education Center (WHEC)

As we look towards the new year, let us focus on our successes, and our work together in the past, to ensure that 2022 will be a great year for everyone, everywhere! Keep your thoughts, ideas and questions coming – we welcome them. We can do this!

Workers, aiming to recover valuable materials such as copper and gold, are at risk of exposure to over 1,000 harmful substances, including lead, mercury, nickel, brominated flame retardants and polycyclic aromatic hydrocarbons (PAHs). For expectant mothers, exposure to toxic e-waste can affect the health and development of her unborn child for the rest of their life. Potential adverse health effects include negative birth outcomes, such as stillbirth and premature births, as well as low birth weight and length. Exposure to lead from e-waste recycling activities has been associated with significantly reduced neonatal behavioral neurological assessment scores, increased rates of attention deficit/hyperactivity disorder (ADHD), behavioral problems, changes in child temperament, sensory integration difficulties, and reduced cognitive and language scores. Other adverse child health impacts linked to e-waste include changes in lung function, respiratory and respiratory effects on the body, DNA damage, impaired thyroid function and increased risk of some chronic diseases later in life, such as cancer and cardiovascular diseases and chronic lung diseases.

This is a rising issue that many countries do not recognize yet as a health problem. If they do not act now, its impacts will have a devastating health effect on children and lay a heavy burden on the health sector in the years to come. **Improper e-waste management is the cause.**

As many as 12.9 million women are working in the informal waste sector, which potentially exposes them to toxic e-waste and puts them and their unborn children at risk. Meanwhile more than 18 million children and adolescents, some as young as 5 years of age, are actively engaged in the informal industrial sector, of which waste processing is a sub-sector. Children are often engaged by parents or caregivers in e-waste recycling because their small hands are more dexterous than those of adults. Other children live, go to school and play near e-waste recycling centers where high levels of toxic chemicals, mostly lead and mercury, can damage their intellectual abilities. Children exposed to e-waste are particularly vulnerable to the toxic chemicals they contain due to their smaller size, less developed organs and rapid growth and development. They absorb more pollutants relative to their size and are less able to metabolize or eradicate toxic substances from their bodies.

The Women's Health and Education Center's (WHEC's) Initiative on E-Waste and Maternal and Child Health, will be launched in April 2022. It aims to increase access to evidence, knowledge and awareness of the health impacts of e-waste; improve health sector capacity to manage and prevent risks; track progress and promote e-waste policies that better protect women's and children's health; and improve monitoring of exposure to e-waste and the facilitation of interventions that protect public health.

Call to Action

Join the movement!

e-Waste and Our Health

Rita Luthra, MD



Your Questions, Our Reply

What can be done about e-waste? Why are children more vulnerable to the health impacts associated with informal recycling of e-waste? How much e-waste is generated each year and where does it go?

Women and Children and e-Waste Dumpsites: A Rapidly Escalating Problem. According to the Global E-waste Statistics Partnership's Global E-waste Monitor, in 2020, some 53.6 million tons of e-waste were generated, equivalent in weight to 350 cruise ships. It had grown 21% since 2014. Only 17% of e-waste produced in 2020 reached formal management or recycling systems. The rest was illegally dumped domestically or internationally, overwhelmingly in low- and middle-income countries. e-waste is expected to reach 74.7 million tons by 2030.

In response to the health threats informal waste disposal poses, WHEC and its partners have called for stronger action on improperly recycled e-waste. Our Recommendations are:

- Ensure health and safety of e-waste workers, children, their families and communities with systems that train and protect workers, which monitor exposures and health outcomes, and that make protecting children the highest policy priority;
- Enforce sound environmental health practices for disposal, recapture and reuse of materials;
- Shift towards a circular economy by manufacturing more-durable electronics and electrical equipment, using safer and less-toxic materials, and encouraging sustainable consumption to reduce e-waste – as proposed to current trend of increasing turnover;
- Manage e-waste by prioritizing health and environmental protection throughout the life cycle, with reference to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, appropriate regional conventions and the SDGs on waste management.
- Eliminate child labor and incorporate adult e-wastes workers into the formal economy with decent conditions across the value chain of collection, processing/recycling and resale by incorporating informal workers in the formal economy.

There are economic and environmental imperatives involved too – better recycling presents opportunities for increased income and decreased demand for new materials.

Opportunities for health sectors for leadership and collaboration include:

- Regional and national capacity-building for health-based assessment of e-waste policies and regulations, particularly regarding women and children's health.
- Raising awareness of e-waste health risks and encouraging responsible recycling with policy-makers, communities, waste workers and their families.
- Building health sector capacity to diagnose, monitor and prevent toxic exposures within primary health care services for children and women.
- Pursuing better data and further research about women and children involved with e-waste, as well as studies about implementation and effectiveness of protective measures.

We believe health sector can play a role by providing leadership and advocacy, conducting research, influencing policy makers, engaging communities, and reaching out to other sectors to demand that health concerns be made central to e-waste policies.

Let us join together to reduce e-waste and dispose it off properly!



United Nations at a Glance

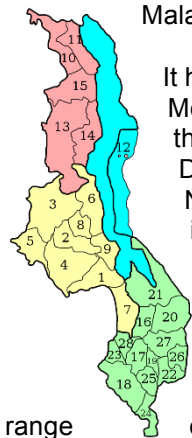
Permanent Mission of Malawi at the United Nations



Malawi became UN Member State on 1 December 1964

Malawi, officially the **Republic of Malawi**, is a landlocked country in southeastern Africa that was formerly known as Nyasaland. It is bordered by Zambia to the west, Tanzania to the north and northeast, and Mozambique to the east, south and southwest. Malawi spans over 118,484 km² (45,747 sq. mi) and has an estimated population of 19,431,566 (as of January 2021). Malawi's capital (and the largest city) is Lilongwe. The country is nicknamed "The Warm Heart of Africa" because of the friendliness of its people. Official Language: English, Chewa; Ethnic groups: Chewa, Lomwe, Yao, Ngoni and others. Religion: 82.3% Christianity; 13.8% Islam; Government: Unitary Presidential republic; Legislature: National Assembly.

Malawi is among the world's Least-Developed Countries (LDCs). The economy is heavily based on agriculture, and it has a largely rural and rapidly growing population. The Malawian government depends heavily on outside aid to meet its development needs, although the amount needed (and the aid offered) has decreased since 2000. The Malawian government faces challenges in its efforts to build and expand the economy, improve education, healthcare, and environmental protection, and become financially independent despite widespread unemployment. Since 2005, Malawi has developed several programs that focus on addressing these issues, and the country's outlook appears to be improving: key indicators of progress in the economy, education, and healthcare were seen in 2007 and 2008.



Malawi is divided into 28 districts within three regions.

It has been seen as a haven for refugees from other African countries, including Mozambique and Rwanda since 1985. These influxes of refugees have placed a strain on the Malawian economy but have also drawn significant inflows of aid from other countries. Donors to Malawi include United States, Canada, Germany, Iceland, Japan, the Netherlands, Norway, Sweden, Ireland, the UK and Belgium, as well as international institutions such as the World Bank, the International Monetary Fund, the European Union (EU), the African Development Bank and UN Organizations.

Status of women in Malawi

The Status of women throughout the world, including Malawi, is measured using a wide range of indices that cover areas of social, economic, and political contexts. Focusing primarily on the time period between 2010 and the current day, the status of women in Malawi will be analyzed through a range of statistical indices. The current status of women in Malawi is effectively estimated through indices such as female access to schooling, maternal mortality rate, and life expectancy of women from birth. Along with their poor international ranking, the state scores poorly when compared to other sub-Saharan countries as the highest-ranked sub-Saharan state, Rwanda, scored a 0.791 on a 0-1 scale while Malawi scored 0.664.

Gender gaps in property ownership in Sub-Saharan Africa

[World Bank Document](#)

<https://documents1.worldbank.org/curated/en/939291535658711278/pdf/WPS8573.pdf>

Collaboration with World Health Organization (WHO)

WHO | Malawi



The Malawi country health profiles provide an overview of the situation and trends of priority health problems and health systems profile, including a description of the institutional frameworks, trends in the national response, key issues and challenges. They promote evidence-based health policymaking through a comprehensive and rigorous analysis of the dynamics of the health situation and health system in the country.

Malawi is a low-income country with high levels of child and adulthood mortality rates and high prevalence of diseases such as tuberculosis, malaria, HIV/AIDS and other tropical diseases. Healthy life expectancy (HALE) at birth was 44 years in 2007. Furthermore, evidence suggests that there is growing

Malawi human resources for health – there are only 2 physicians and 38 nurses per 100,000 population. In 2010, vacancy rates for nurses at national level stood at 74%. The government in conjunction with its development partners implemented a 5-pronged 6-year Emergency Human Resources Plan from 2005 – 2010 which included a 52% salary top up to 11 cadres of health professionals. This resulted in a 50% increase in the health work force and enrollment in training institutions. The challenge is to sustain and improve the gains so far made.

HIV/AIDS prevalence is very high - The 2004 Demographic and Health Survey indicates that 12% of the population aged 15 – 49 years in Malawi is living with HIV/AIDS. The observed and adjusted HIV prevalence among women and men aged 15 – 49 years were 10.8% and 12.7% respectively. Estimated prevalence of 17.1% in urban and 10.8% in rural areas. Approximately 80,000 people die of AIDS annually and an almost equal number of new infections occur yearly. There are approximately 600,000 orphans in Malawi due to HIV/AIDS. Substantial progress has been made in the provision of antiretroviral therapy (ART). By the end of 2010, an estimated 250,000 people had been ever started on ART representing 52% of those in need.

Maternal Mortality is still among the highest in Africa. Based on the 2010 EmONC assessment, 65% of women in Malawi are delivered by skilled workers. Only 2% of all the BEmONC sites and about 48% of the CEmONC sites are fully functional. Obstetric complications contribute significantly to maternal deaths and bleeding alone accounts for 40% of all deaths. Other indirect causes delays in seeking care, poor referral system, and lack of appropriate drugs, equipment and staff capacity. The assessment also revealed that not much progress has been made in making the services accessible to hard-to-reach areas. The findings of the EmONC assessment have informed the revision of the roadmap to accelerate reduction of maternal mortality.

HEALTH & DEVELOPMENT

Water and Sanitation – Malawi is on track for MDG 7 for access to safe drinking water (75%) and basic sanitation (88% of the rural population has access to basic excreta disposal). However, improved sanitation facilities currently standing at 56% is still low.

Health sector reforms – the Sector Wide Approach (SWAp) was adopted in 2008 to rally all health development partners behind a single sector program and expenditure framework. In 2010, the government conducted a review of the health SWAp whose findings lead to the expansion of the WHP and formulation of the Health Sector Strategic Plan 2011 – 2016. The new strategic plan is informed by the Ouagadougou Declaration and places emphasis on health promotion and disease prevention as the majority of the diseases affecting Malawians are preventable .

Details: <https://www.afro.who.int/countries/malawi>



Malawi became UNESCO Member State on 27 October 1964



Chongoni Rock-Art Area (Malawi) The Chewa agriculturalists, whose ancestors lived there from the late iron age, practiced rock painting until well into the 20th century. The symbols in the rock art, which is strongly associated with women, still have cultural relevance amongst the Chewa, and the sites are actively associated with the ceremonies and rituals.

STEP Project Concludes but Skills Development work continues in Malawi.

UNESCO, the Malawi Government's Ministry of Labour and European Union Delegation to Malawi held a conference to mark the end of Skills and Technical Education (STEP) on 30 July 2021. The project implementation period has been 5 years and four months.

65 participants attended the conference that shared the project's achievements, best practices, and challenges. Some 21 participants were present physically in Lilongwe, Malawi while the rest attended virtually, from within and outside the country.

STEP has been a 32 million Euros programme for the TVET sector in Malawi with 9 million Euros for the component UNESCO managed. The component sought to:

1. Increase girls and women participation in TVET,
2. Improve the relevance and quality of TVET curriculum, and
3. Improve the management and governance of TVET institutions.

STEP also enhanced TVET teachers' development and skills in the country, the relevance of TVET programmes in both formal and informal sectors as well as the governance and management of TVET regulatory bodies and training institutions.

One challenge STEP encountered was the COVID-19 pandemic that stalled teaching and learning in the education sector. The STEP project responded by providing COVID-19 prevention and management to the TVET managers and teachers in the institutions. The training and capacity building was provided by Mzuzu University through a partnership with UNESCO. In addition, the response to COVID-19 equipped some eleven TVET colleges with ICT equipment to assist in online learning as mitigation for the closure of colleges due to COVID-19.

Teachers in Malawi say a comprehensive teacher policy is critical

The teacher policy in Malawi is very timely and will be critical in addressing most of the challenges teachers have been facing in the country. Continuous Professional Development (CPD) implementation plan; and to share experiences and explore effective ways of continuing teaching and learning in the context of COVID-19 and future emergencies. The ministry will continue to work hard to ensure that Malawi's educational policy frameworks put teachers, as implementers of the curriculum and facilitators of learning, at the center of ensuring access to and quality of education.

<https://en.unesco.org/countries/malawi>

Bulletin Board

LINK Access Project

To provide access to reproductive health research worldwide.

(Learning, Innovating, Networking for Knowledge [LINK])

Our friendship has no boundaries

The Women's Health and Education Center's Global Health Line (**WGHL**) aims to establish in collaboration with programs in low- and middle-income countries, to improve Sustainable Development Goals 3, 4, and 5, improve maternal and child health, in collaboration with the developed countries of mutual benefits and mutual respect, through its **LINK Access Project**.

We believe, education improves health and health improves learning potential.

WGHL has been instrumental in developing the syllabus for the continuing medical education curriculum – currently serving in 227 countries and territories and providing access to evidence-based research and research initiatives in wide variety of women's and children's health and wellbeing projects and programs.

We Welcome Everyone!



Purpose / Function

- To place public health on the agenda and to catalyze collaborative networks – cutting across disciplines, sectors and borders.
- To promote and use of a broad understanding of women's and children's health; seek science and technology-based solutions to development challenges.
- To promote Health & Human Rights. Many economic and social factors impact women's and children's health and wellbeing to achieve good health and good healthcare system.
- To plan, promote and implement Best-Practices in both Developed and Developing Countries.

The philosophy behind this purpose is based on the belief that **Continuing Education** is a life-time commitment requiring knowledge of current trends and developments in the science, technology and economics of healthcare.

We invite you to enjoy these courses for your personal development or share this publication with other healthcare professionals, policy-makers or your friends.

WHEC supports various international policies, such as Health21 – The health for all policy framework, to ensure the use of health impact assessment (HIA).

We are everywhere – so you can be anywhere – you want to be.

[Women's Health and Education Center \(WHEC\) - Continuing Medical Education - Continuing Medical Education \(womenshealthsection.com\)](http://www.womenshealthsection.com)

<http://www.womenshealthsection.com/content/cme/>

To be continued.....



Collaboration with UN University (UNU)

UNU-WIDER (World Institute for Development Economics Research)

Expert Series on Health Economics

Initial considerations for the creation of an inter-regional industrial hemp value chain between Malawi and South Africa

Interest in industrial hemp has revived in the past 20 years. Malawi is considering legalizing the cultivation of industrial hemp as an alternative cash crop to tobacco with great potential. This study considers the potential and challenges of creating an industrial hemp value chain between South Africa and Malawi, with Malawi concentrating on upstream cultivation and South Africa on downstream value-adding activity. The research supports a finding that industrial hemp offers strong opportunities as a niche market even if mainstream demand is slow to materialize or does not materialize at all. It also shows that undertaking such as inter-regional endeavor would be considerably more complicated than initially envisaged, given the agricultural structure and operation of the Malawian economy and its smallholder farmers.

Over the past two decades the Malawian government, donors, and scholars have (with increasing urgency) advocated for the diversification of the Malawian agricultural sector in general, and in particular, diversification away from the pariah crop of burley leaf tobacco. Malawian researchers, agronomists, and politicians believe that the legalization of industrial hemp as an agricultural commodity is imminent in Malawi. It is therefore possible that Malawi could cultivate, harvest, and undertake primary processing of an industrial hemp crop using knowledge and infrastructure currently used in the tobacco industry. Further, it is believed that South Africa could undertake secondary value-added production of primary and intermediate industrial hemp exports from Malawi.

What is abundantly clear is that most important single contributor to the success or failure of a novel crop is market demand (which in the case of industrial hemp is strongly influenced by social and political issues). The present research suggests that current global demand is sufficient only to support industrial hemp as a niche market. This demand is dominated by drivers related to the health food properties of the product and its therapeutic uses as an oil and as an input in personal care and cosmetics. There appears to be a shared view that if industrial hemp is to become a mainstream, large-scale, commercially cultivated crop at a global level, demand for environmentally friendly alternative consumer and industrial goods would need to grow substantially. Currently, demand for non-fossil fuel renewables and environmentally friendly alternative products is sufficient patchy, fragmented, and variable that the market for industrial hemp products and downstream processed products is niche, with thin markets and low traded volumes. Whether this will change is hard to predict.

The initial research effort suggest that if the Malawian Parliament votes to legalize the cultivation of industrial hemp (as is expected), then the opportunity to develop a regional value chain between that country and South Africa has interesting and potentially positive commercial implications. Additional research and quantification would be required in relation to designated crop yields, South Africa market demand, and transport costs, but preliminary findings suggest that industrial hemp would indeed be a profitable and potentially strategic diversification for both states. If and when the legislative constrains on cultivation are lifted, challenges will remain to implement such a value chain, but no challenges have been identified that would not in principle be solvable.

Publisher: UNU-WIDER; Author: Sandy Lowitt; Sponsors: The Institute is funded through income from an endowment fund with additional contributions to its work programme from Finland, Sweden, and the United Kingdom as well as earmarked contributions for specific projects from a variety of donors.

Details of the paper can be accessed from the link of UNU-WIDER on CME Page
<http://www.womenshealthsection.com/content/cme/>

Two Articles of Highest Impact, December 2021

Editors' Choice – Journal Club Discussions

Fully open-access with no article-processing charges

Our friendship has no boundaries. We welcome your contributions.

1. Vitamin K Deficiency Bleeding; <http://www.womenshealthsection.com/content/obsnc/obsnc014.php3>
WHEC Publications. Funding: WHEC Global Initiatives are funded by a grant from an anonymous donor. Join us at WHEC Global Health Line for discussion and contributions.
2. Anxiety Disorders; <http://www.womenshealthsection.com/content/gynmh/gynmh003.php3>
WHEC Publications. Funding: WHEC Global Initiatives are funded by a grant from an anonymous donor. Join us at WHEC Global Health Line for discussion and contributions.

Partnership for Maternal, Newborn & Child Health (World Health Organization) PMNCH Member

Worldwide service is provided by the WHEC Global Health Line



Global Issues and Women's Health and Education Center's (WHEC) Participation

Africa – WHEC's Participation

As the world's only truly universal global organization, the United Nations (UN) has become the foremost forum to address issues that transcend national boundaries and cannot be resolved by any one country action alone. Through its unique capacities as the world's premier vehicle for international cooperation, the UN system plays a role in coordinating assistance of all kinds – to help Africa help itself.



Women's Health and Education Center's (WHEC's) Global media promotes the development of democratic institutions, to establish peace between warring nations. The WHEC with UN System support helps economic and social development and promotion and protection of human rights.

To advance its support for Africa even further, the United Nations Office of the Special Adviser on Africa was established in 2003 to enhance the international support for African development and security and to improve coordination of UN System support. It also works to facilitate global deliberations on Africa, particularly with respect to the New Partnership for Africa's Development (NEPAD) – a strategic framework adopted by African leaders in 2001. In 2019, NEPAD's mandate was reformed. It is now serving as the first development agency of the African Union.

Challenges for Africa

Ebola

On 23 March 2014 WHO's African Regional Office reported an outbreak of Ebola virus disease in Guinea. It has quickly spread to other countries in West Africa. The outbreak has been the largest and most complex Ebola outbreak in since the Ebola virus was first discovered in 1976. The Ebola epidemic in West Africa has destroyed lives, decimated communities, and orphaned children in the affected countries.

Peacekeeping

Addressing the challenges posed by protracted conflicts and longstanding disputes on the African continent has been a major focus for the UN. In 1960, the first peacekeeping operation in Africa was deployed in the Republic of the Congo to ensure the withdrawal of Belgian forces and to assist the Government in maintaining law and order. Since then thousands of peacekeepers have been deployed in more than 30 African countries, including Angola, Mozambique, Somalia, Sierra Leone, Ethiopia and Eritrea, Burundi and Sudan. The latest peacekeeping mission was established in 2014 in the Central African Republic.

International Criminal Tribunal for Rwanda

The UN Security Council established the International Criminal Tribunal for Rwanda (ICTR) to "prosecute persons responsible for genocide and other serious violations of international humanitarian law committed in the territory of Rwanda and neighboring States in 1994." During its operation, the Tribunal indicted 93 individuals including high-ranking military and government officials, politicians, businesspeople, as well as religious, militia and media leaders. The ICTR is the first ever international tribunal to deliver verdicts in relation to genocide, and the first to interpret the definition of genocide set forth in the 1948 Geneva Conventions. It is also the first international tribunal to define rape in international criminal law and to recognize rape as means of perpetrating genocide, as well as first international tribunal to hold members of militia responsible for broadcasts intended to inflame the public to commit acts of genocide.

Achievements

Decolonization

At the end of World War II in 1945, nearly every country in Africa was subject to colonial rule or administration. Following the founding of the UN in 1945 and its massive decolonization effort, Africa is now virtually free from colonial rule. In 2011, South Sudan became Africa's newest country when it gained independence from the rest of Sudan.

Economic Growth

The continent's economy grew by roughly 3.4% in 2019, creating one of the largest stretches of uninterrupted positive economic growth in Africa's history.

Advancement of Women

In eleven African countries, women hold close to one-third of the seats in parliaments. With 61%, Rwanda has the highest proportion of women parliamentarians in the world. One in four women starts or manages a business. With Rwanda and Namibia, two Sub-Saharan African countries, belong to the top ten of the most gender-equal countries, according to the 2018 World Economic Forum's Global Gender Gap Report.

Our Agenda 2063

[Agenda 2063 | African Union \(au.int\)](https://au.int/en/agenda2063) <https://au.int/en/agenda2063>



In The News

Soaring e-Waste Dumpsites in low- and middle-income countries



A significant proportion of e-waste produced every year is exported from high-income countries to low- and middle-income countries, where there may be a lack of regulation, or where regulation does exist, it may be poorly enforced. Here, e-waste is dismantled, recycled and refurbished in environments where infrastructure, training and environmental and health safeguards may be non-existent or poorly adhered to. This places e-waste workers, their families and communities in greater danger of adverse health effects from e-waste recycling.

Rapid innovation and lowering costs have dramatically increased access to electronic products and digital technology, with many benefits. This has led to increase in the use of electronic devices and equipment. The unintended consequence of this is a steep growth of electronic and electrical waste: e-waste.

Globally, society only deals with 20% of e-waste appropriately and there is little data on what happens to the rest, which for the most part ends up in landfill, or is disposed of by informal workers in poor conditions. Yet e-waste is worth at least \$62.5 billion annually, which is more than the gross domestic product (GDP) of most countries.

Time for Global Reboot

Changes in technology such as cloud computing and internet of things (IoT) could hold the potential to dematerialize the electronics industry. The rise of service business models and better product tracking and takeback could lead to global circular value chains. Material efficiency, recycling infrastructure and scaling up the volume and quality of recycled materials to meet the needs of electronics supply chains will be essential.

If the sector is supported by the right mix and managed in the right way, it could lead to the creation of millions of decent jobs worldwide. A new vision for the production and consumption of electronic and electrical goods based on the circular economy is needed.

It is easy for e-waste to be framed as a post-consumer problem; the issue encompasses the life-cycle of the devices everyone uses. Designers, manufacturers, investors, traders, miners, raw material producers, consumers, policy-makers and other have a crucial role to play in reducing waste, retaining value within the system, extending the economic and physical life of an item, as well as its ability to be repaired, recycled and reused.

E-Waste Defined

E-waste is defined as anything with a plug, electric cord or battery (including electrical and electronic equipment) from toasters to toothbrushes, smartphones, fridges, laptops and LED television that has reached the end of its life, as well as the components that make up these end-of-life products. E-waste is also called waste electrical or electronic equipment, or WEEE for short. Currently only a few countries have a uniform way to measuring this waste. E-Waste comes from many sources including households, businesses and governments.

E-waste may contain precious metals such as gold, copper and nickel as well as rare materials of strategic value such as indium and palladium. E-waste may represent only 2% of solid waste streams, yet it can represent 70% of the hazardous waste that ends up in landfill.

Art & Science

Art that touches our soul

Saints Cosmas and Damian by Jean Bourdichon



Saints Cosmas and Damian were two Arab physicians, reputedly twin brothers, and early Christian martyrs. Born: c.3rd century Arabia; Died: c.287 Aegea, Roman province of Syria.

Depicted as twins, beheaded, with medical emblems.

They practiced their profession in the seaport of Aegeae, then in the Roman province of Syria. Accepting no payment for their services led to them being named anargyroi ('unmercenaries'). It has been said that, by this, they attracted many to the Christian faith. During the persecution under Diocletian, Cosmas and Damian were arrested by order of the prefect of Cilicia, one Lysias who is otherwise unknown, who ordered them under torture to recant.

However, according to legend, they stayed true to their faith, enduring being hung on a cross, stoned and shot by arrows and finally suffering execution by beheading. Anthimus, Leontius and Eurprepius, their younger brothers, who were inseparable from them throughout life, shared in their martyrdom.

This picture is an icon of Saints Cosmas and Damian, painted by French miniature painter and manuscript illuminator Jean Bourdichon for the *Grandes Heures of Anne of Brittany*, a book of hours produced in the early 16th century. Cosmas (left) is depicted with a urine bottle, while Damian (right) holds a medicine box. The icon, as well as the book of hours, is in the collection of the *Bibliothèque nationale de France*.

Jean Bourdichon (1457 or 1459 – 1521) was a French miniature painter and manuscript illuminator at the court of France between the end of the 15th century and the start of the 16th century, in the reigns of Louis XI of France, Charles VIII of France, Louis XII of France and Francis I of France.

*Monthly newsletter of WHEC designed to keep you informed on
The latest UN and NGO activity*

<http://www.WomensHealthSection.com>

