National Workshop on
Integrated Healthcare Waste Management (IHCWM) and Water Sanitation & Hygiene (WASH) in Healthcare Facilities

Disposal of Menstrual Waste: Time to Act

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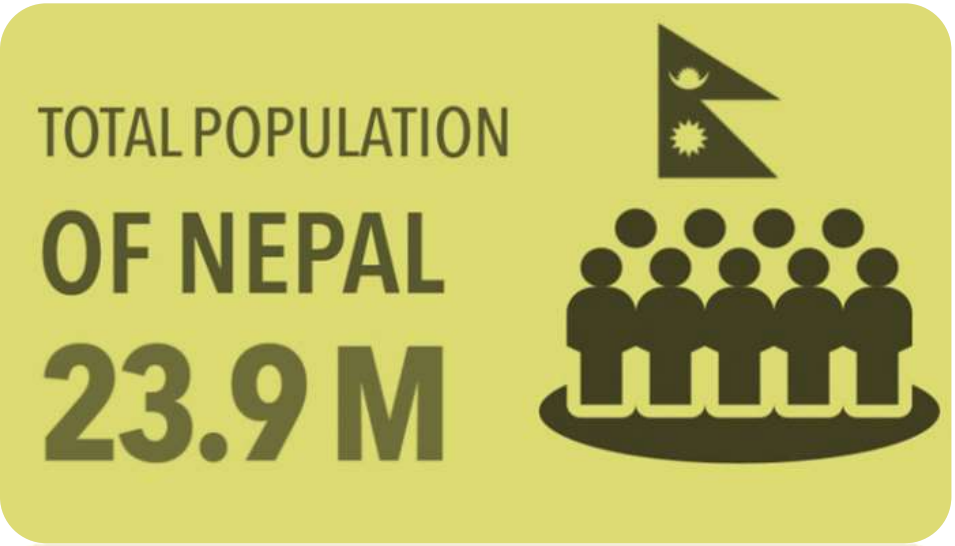
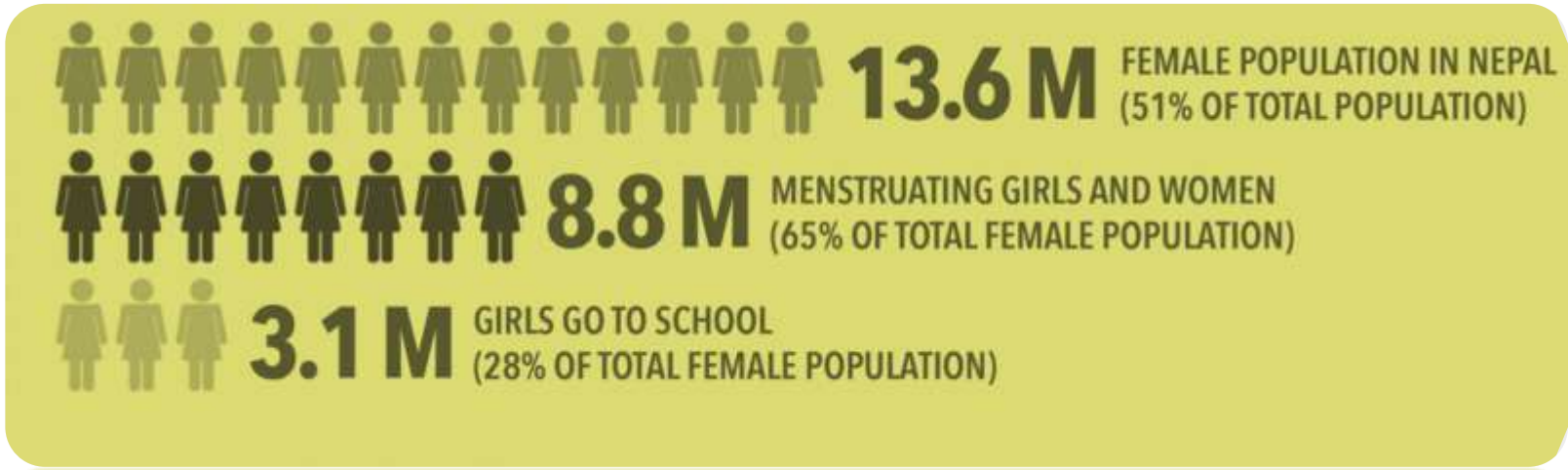
Disposal of Menstrual Waste: Time to Act

MENSTRUAL HYGIENE MANAGEMENT IN NEPAL



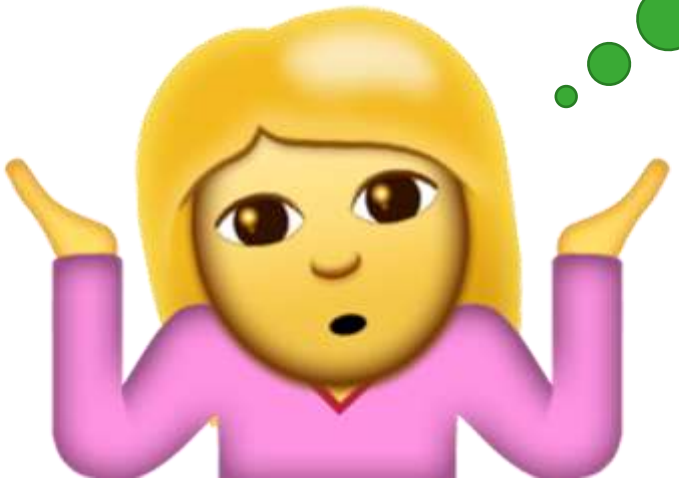


CENTRAL BUREAU STATISTIC (2014), POPULATION MONOGRAPH OF NEPAL, VOLUME II (SOCIAL DEMOGRAPHY). FIRST EDITION ISBN: 978-9937-2-8972-6

Sanitary Waste Load Calculation

RESEARCH ON L. Y. SCOPING REVIEW AND PRELIMINARY MAPPING MENSTRUAL HEALTH AND HYGIENE MANAGEMENT IN NEPAL (PP. 1-96).

Where Do these 127 Million pads go ?



DISPOSED OPENLY

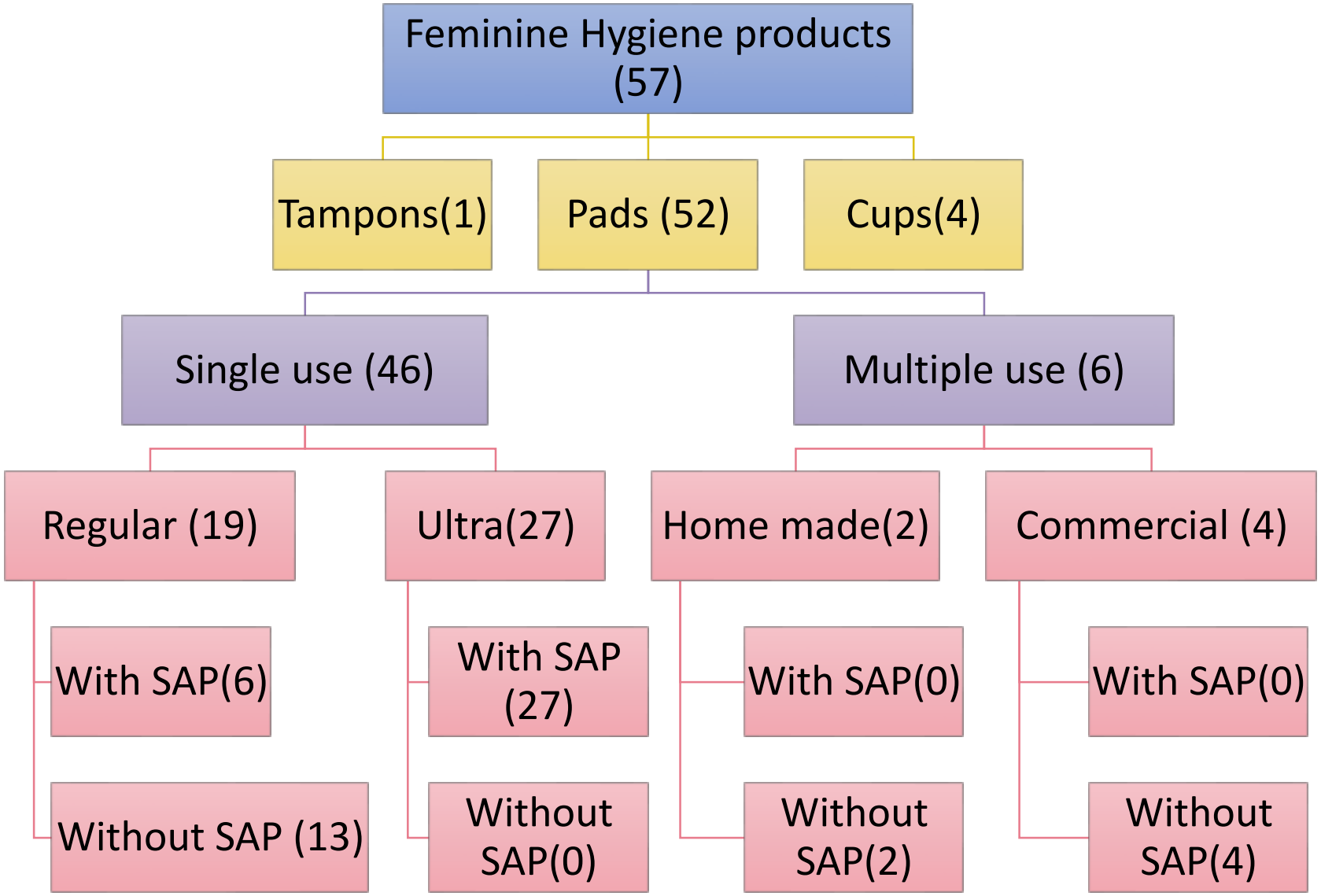
BURIED UNDERGROUND

BURNT IN THE OPEN

DISPOSED IN LANDFILL WITH OTHER WASTE

Feminine Hygiene Products Available

Menstrual Products Available in Nepal



Current Disposal Practice

Final Disposal: Our Current Practice

Disposing in toilet/bin

Open Dumping

Burial

How Diapers and Menstrual Pads Are Exposing Babies and Women to Hormone-Disrupting, Toxic Chemicals

January 28, 2019 Environmental Health News by Brian Bienkowski Health Issues

Health advocates say the report is the latest example of products falling through regulatory cracks and an inadequate societal focus on women's reproductive health.

Most diapers and sanitary pads contain volatile organic compounds and phthalates and with this continued, long-term exposure a significant amount of these harmful chemicals could be absorbed via the genitals, according to a new study.

The study was spurred by an investigation from South Korean media outlets in 2017 that found new sanitary pads might be causing menstrual problems and irregularities and was broadened to the U.S. and other countries. More than 15,000 women complained and signed onto a class action lawsuit claiming harm from menstrual pads by the company Lillian. The pads were removed from the market. Women alleged rashes, infections, irregular periods and bad cramping.

Scientists and advocates say the exposure uncovers a gap in our regulation of baby's diapers and is emblematic of our society's historical unease with having productive conversations about women's reproductive health.

"The physical location of the exposure site, the high absorption rate of the genitalia for chemicals, and the long-term exposure period demand a thorough investigation on the potential impact of the exposure to VOCs and phthalates," the authors wrote in the study, which will be published in *Reproductive Toxicology*.

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Chemicals in Sanitary Pads

LYNN PARRIS

The chemicals used in sanitary pads, tampons and diapers raised concerns throughout the world -- particularly near the turn of the 21st century — due to questions about the safety of certain chemicals used in their manufacture, as well as the environmental issues of disposing of them. Because of potential risk factors, some women have opted for organic sanitary pads as an alternative and others have decided to use reusable sanitary pads.

Dioxin

A bill introduced in Congress in March 1999 -- The Tampon Safety and Research Act of 1999 noted

"dioxin is a by product of chlorine - bleaching processes used in the manufacture of paper products including tampons, sanitary pads, panty liners and diapers" further pointed out that the effects of dioxin are cumulative and that the chemical may stay in the body for 20 years after exposure.

Other Chemicals

A close relative of dioxin, furan is also found in bleached paper products, including sanitary pads, diapers and tampons. Research published in the Textile Research Journal in 2007 extracted the chemical found in sanitary pads tampons throughout the world. While results varied among products, octachlorinated dioxin (OCDD), hexachlorodibenzofuran (HxCDF) and octachlorodibenzofuran (OCDF) were detected. These are all banned toxic substances.

Menstrual Hygiene Products and Waste Management Solutions

9. Better Ways/Ideas of Disposing Menstrual Wastes

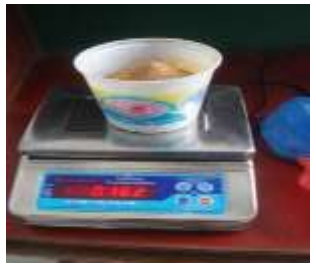
9.1. Incinerators. If incinerators are used according to ecofriendly guidelines they create less pollution. They should be operated at certain specific temperature around 800°C so that they emit less harmful gasses. They should be installed in schools, institutions, and slum areas and at community level

9.3. Reusable Cloth Pads. Using these reusable cloth pads is a better option as they have less chemical and plastic

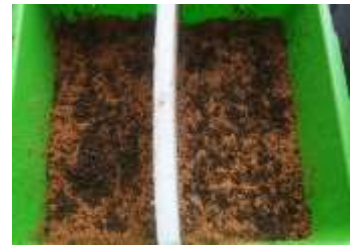
9.4. Biodegradable Products. Commercial sanitary product manufacturing companies must manufacture products having lesser chemical and plastic content. Pads made from bamboo fibre, banana fibre, water hyacinth, and sea sponges should be encouraged.

9.6. Better Disposal Techniques. Special covered bins should be installed to handle menstrual waste. Disposal bags should be provided by manufacturing companies with color indication for disposing these products. These bags should be freely distributed among schools and institutions. Menstrual waste should not be disposed of along with domestic waste. Pads should be properly wrapped in newspaper and then thrown in the dustbins. By this it should also be safe for rag pickers as it does not expose them to any disease-causing pathogens.

Disposal of Feminine Sanitary Products




No time to waste!
Together for a healthy Nepal




HECAF-NEPAL

Weekly Recording of Vermicomposting in Feminine Hygiene Products

Health Care Foundation Nepal

Health Care Waste Management Program

Weekly data on vermicomposting of 12 sanitary pads from Nepalese Market.

	G1	G2	G3	G4	B1	B2	B3	B4	P1	P2	R1	R2	Remarks
Week 1													
Temperature°C	24·14	24·6	24·3	24·5	24	14·12	21·8	23·8	24·9	21·9	23·9	24·8	
pH	7·4	7·2	7·5	7·5	7·5	7·5	7·5	7·5	7·5	7·10	7·5	7·5	
Moisture %	60	50	60	50	60	60	80	75	80	60	60	80	
Week 2													
Temperature°C	25·9	25·8	24·6	24·9	24·5	24·8	24·4	24·6	24·7	24·9	24·7	24·7	
pH	7·5	7·5	7·5	7·5	7·5	7·5	7·5	7·5	7·5	7·5	7·5	7·5	
Moisture %	85	65	70	80	100	100	90	80	85	85	65	90	
Week 3													
Temperature													
pH													
Moisture													
Week 4													
Temperature													
pH													
Moisture													
Week 5													
Temperature													
pH													
Moisture													
Week 6													
Temperature													
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Week 8													
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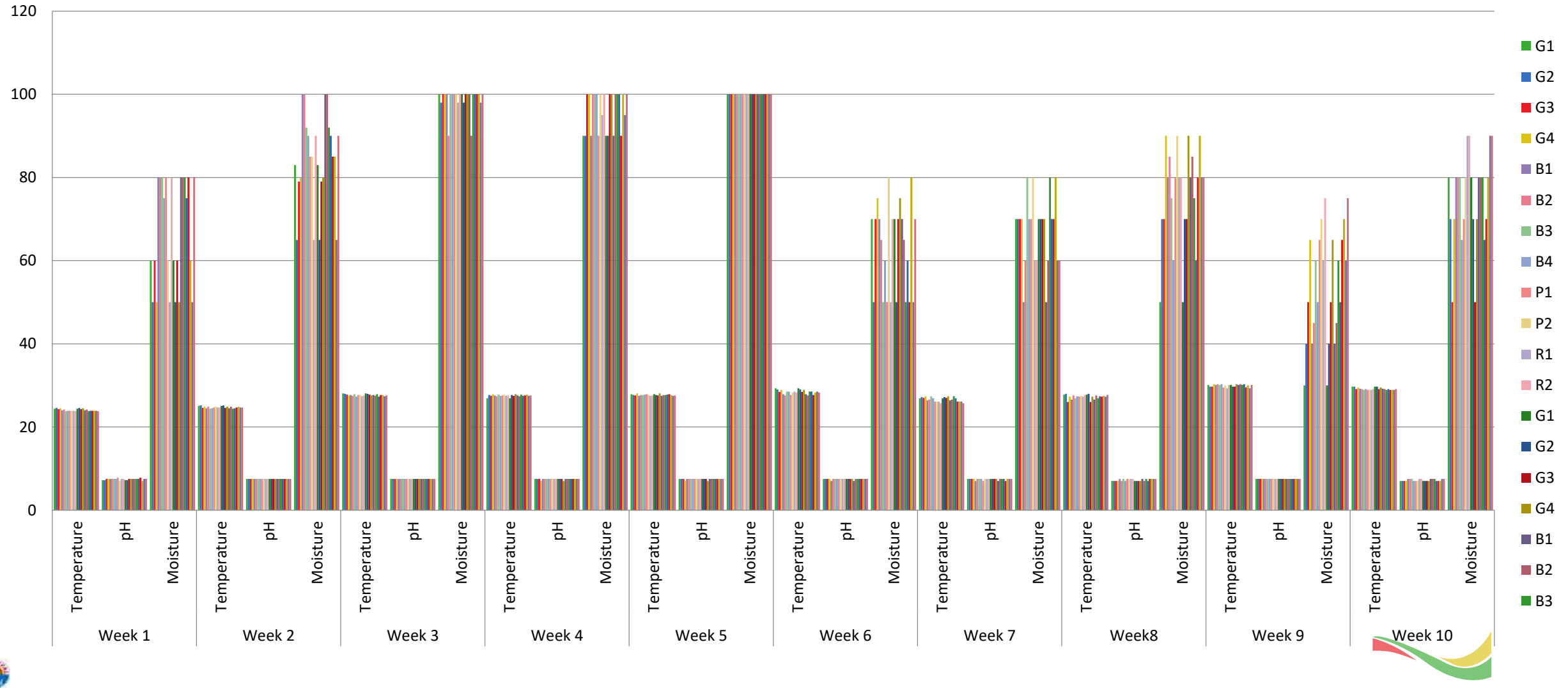
Moisture													
Week 9													
Temperature													
pH													
Moisture													
Week 10													
Temperature													
pH													
Moisture													
Week 11													
Temperature													
pH													
Moisture													

Environment Parameters



Tray 1: Maternity pad *"Peripad"* (G2)

Inoculation: 12 April 2019

Week 1: 19 April 2019

Week 3: 3 April, 2019

Week 4: 10 April,2019

Tray 2: Semjong (G4)

Inoculation: 12 April,2019

Week 1: 19 April,2019

Week 4: 10 May ,2019

Week 6: 24 May,2019

Week 12: 5 July,2019

Week 17: 9 August ,2019

Week 21: 20 september,2019

Tray 6: Whisper Ultra (R1)

Inoculation: 12 April 2019

Week 1: 19 April 2019

Week 4: 10 May 2019

Week 6: 24 May 2019

Week 12: 5 July 2019

Week 17: 9 August 2019

Week 21: 20 Sep,2019

Harvesting

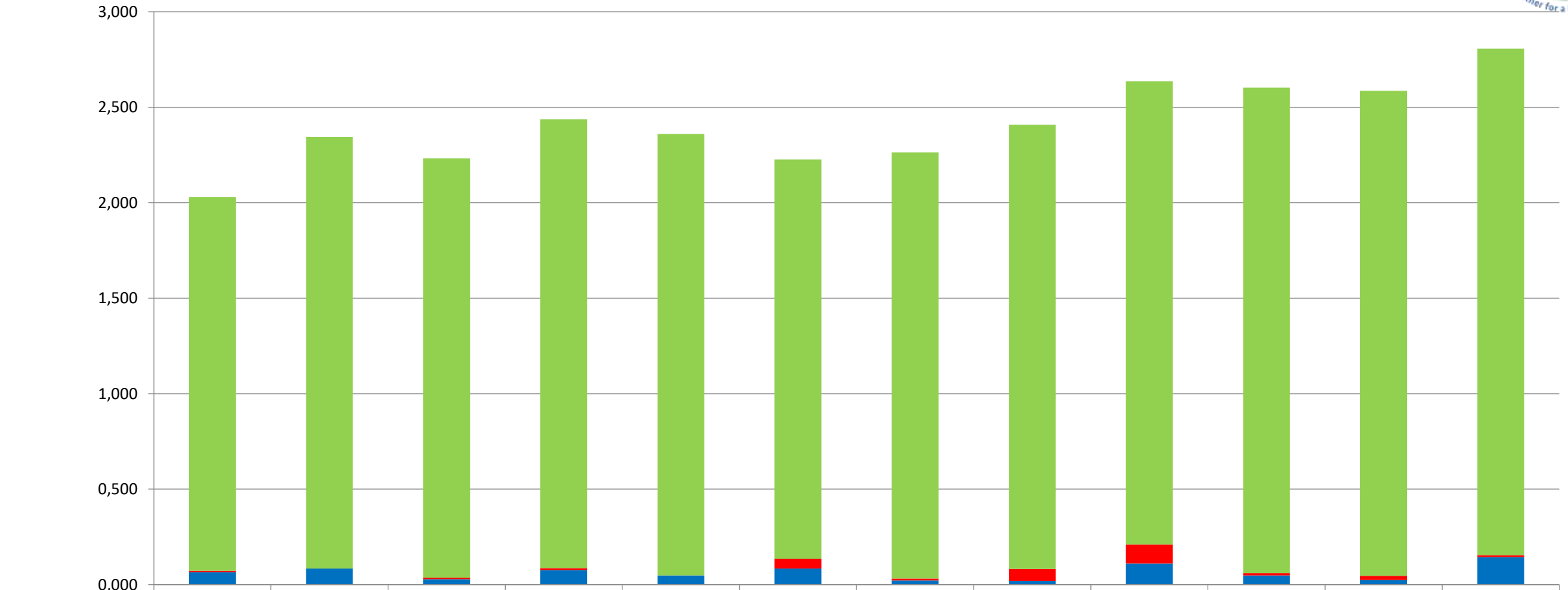
Separation of compost and vermi

Weighing the compost

Weighing the Vermi

Weighing the Sanitary pad

RESULT



	G1(Ria)	G2(Peripad)	G3(Semjong)	G4(Miteri)	B1(Cotton Cloth)	B2(Rotary)	B3(Dhartimata)	B4(Safepad)	P1(Safety R.)	P2(Stayfree R.)	R1(Whisper Ultra)	R2(Styafree Ultra)
Wt. of manure	1,958	2,260	2,196	2,350	2,312	2,090	2,232	2,326	2,426	2,542	2,540	2,652
Wt. of pad	0,006	0	0,008	0,01	0	0,052	0,01	0,062	0,1	0,012	0,022	0,01
Wt. of vermi (gm)	0,066	0,084	0,028	0,076	0,048	0,084	0,022	0,020	0,110	0,048	0,024	0,144

ARE YOU READY TO MAKE THE SWITCH

- For a Safe and Active LIFESTYLE
- For a CLEAN EARTH
- For HEALTHY FOOD, WATER & AIR
- For a HAPPY FUTURE

THE CHOICE IS OURS

Implemented by Health Care Foundation (HECAF) and
funded by GIZ Support to Health Sector Programme