



Pakistan workshop – GHS

8 & 9 December 2025

The project - GHS In Pakistan

- German funding
- GHS outreach and direct work with selected countries
- Agreement with FAO to support logistics of two workshops (Dec. 2025 and ~ May 2026)
- UNITAR providing support and expertise on the GHS
 - Capacity building
 - Workshops
 - E-Learning course (5 Scholarships)
 - Development of a roadmap – requires country buy-in
- Pakistan and relevant stakeholders: show commitment to the GHS, develop capacities, support outreach, engage in roadmap development and commit to actions



GHS – introduction

The GHS



“GHS is the true backbone of chemicals management and its importance cannot be underlined enough!

As a system that ensures **chemical hazards are identified** and classified consistently, it sets universal standards for **protective measures** that prevent exposure.

Through product **labels and safety data sheets**, the communication of hazards helps to ensure chemicals can be used safely, and safeguards people’s health and the environment.”

(Bjorn Hansen, Executive Director-retired, ECHA, January 2022)



Political context of the GHS

Global political backing:

- Plan of Implementation, adopted by WSSD (2002), encouraged **countries to implement the GHS as soon as possible.**
- The GCO-II (UNEP, 2019), under Action 1 on developing effective management systems calls for “**full implementation of the GHS**”.

Political context of the GHS

GHS has direct relevance to:

- **FAO/WHO Code of Conduct on Pesticides** (and labelling guidance)
- **WHO Chemicals Roadmap**
- **ILO Convention 170** “explores critical synergies between the GHS and the ILO’s instruments on chemicals and occupational safety and health, with an aim to further promote GHS implementation and an even greater engagement of the world of work in global efforts towards the safer management of chemicals.”
- **The Rotterdam Convention**
- **The Stockholm Convention**
- **Highly Hazardous Pesticides**
- **Sustainable trade, development**
- **Sustainable chemistry**
- **And more..**



The GHS and the Rotterdam Convention

Information to accompany export (Article 13)

- **Annex III chemicals and those that are banned or severely restricted** in the exporting Parties, when exported, shall be **adequately labelled...** **taking into account international standards** (e.g. UN GHS)
- All hazardous chemicals, when exported, shall be accompanied by **safety data sheets** according to **international standards** (e.g. UN GHS)

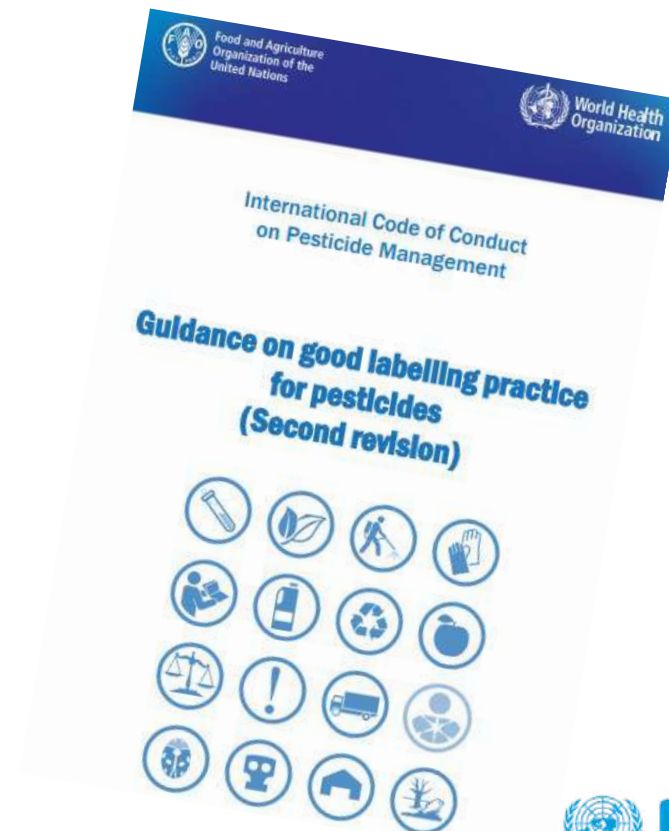
Political context of the GHS

FAO, in their 2022 update to the Guidance on good labelling practice for pesticides notes that:

“the GHS has become the international standard for classification and labelling of chemicals, including pesticides... This guidance recommends use only of the GHS for pesticide labelling”.

Further to this:

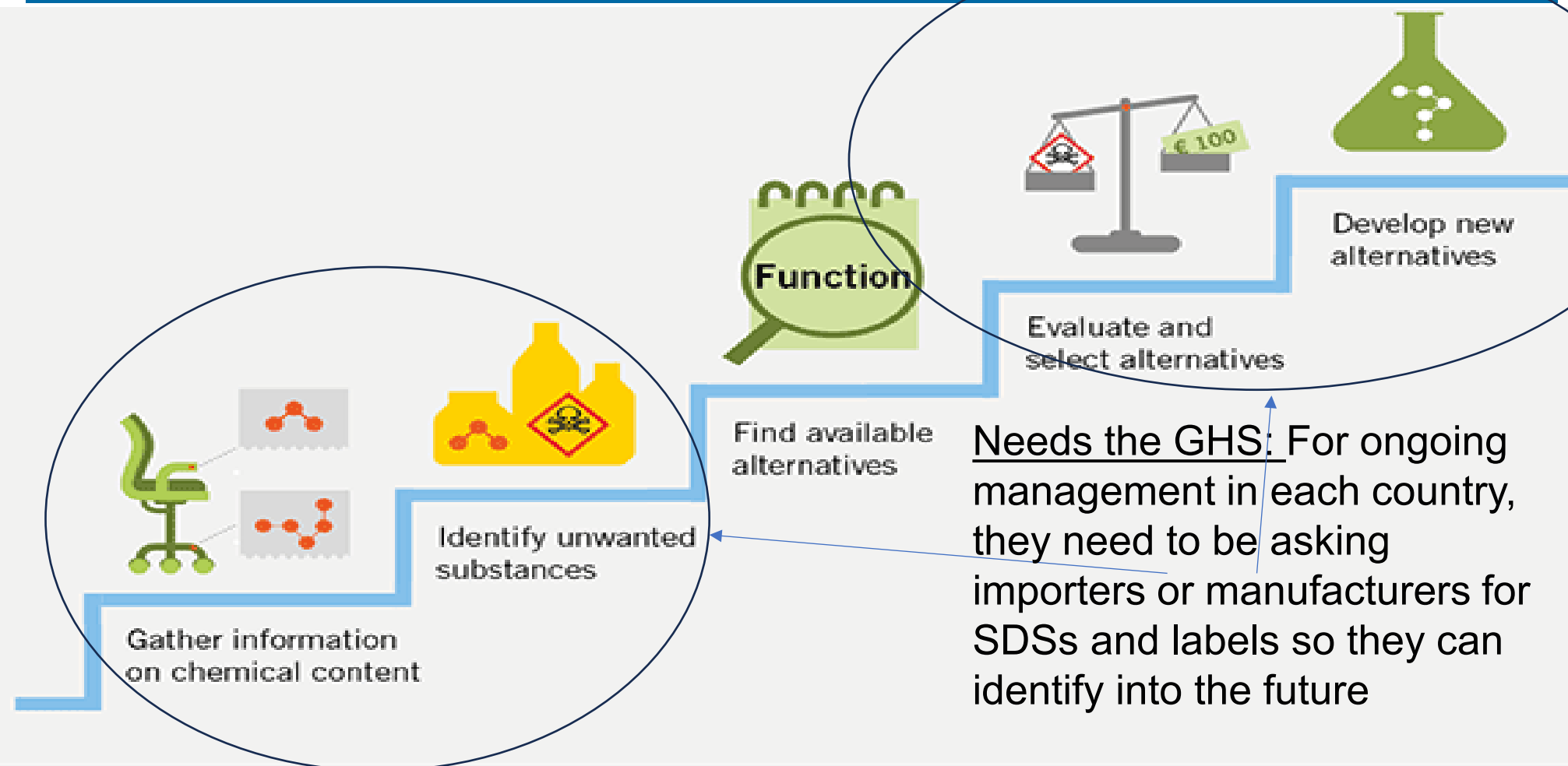
“**FAO** and **WHO**... strongly recommend progressive adoption of the GHS for classification and labelling of pesticides”.



Eight HHPs criteria → GHS

- 1: **WHO** Recommended Classification of Pesticides by Hazard - **formulations**
- 2: Pesticide **ingredients and formulations** - **GHS** carcinogenicity 1A and 1B
- 3: Pesticide **ingredients and formulations** - **GHS** mutagenicity 1A and 1B
- 4: Pesticide **ingredients and formulations** - **GHS** reproductive toxicity 1A & 1B
(2+3+4 = aka “**CMR**”; prioritised among HHPs by some African regions; SADC and the EAC)
- 5: **Stockholm Convention (ingredients)**
- 6: **Rotterdam Convention (ingredients)**
- 7: **Montreal Protocol (listed pesticides)**
- 8: Pesticide **ingredients and formulations** - high incidence of severe or irreversible adverse effects on human health or the environment.

The GHS – a durable basis upon which to transition to sustainable alternatives



The five steps in the substitution process (click to enlarge).

* Keml: substitution of hazardous substances



A reminder of where we are

GHS and the Global Framework on Chemicals

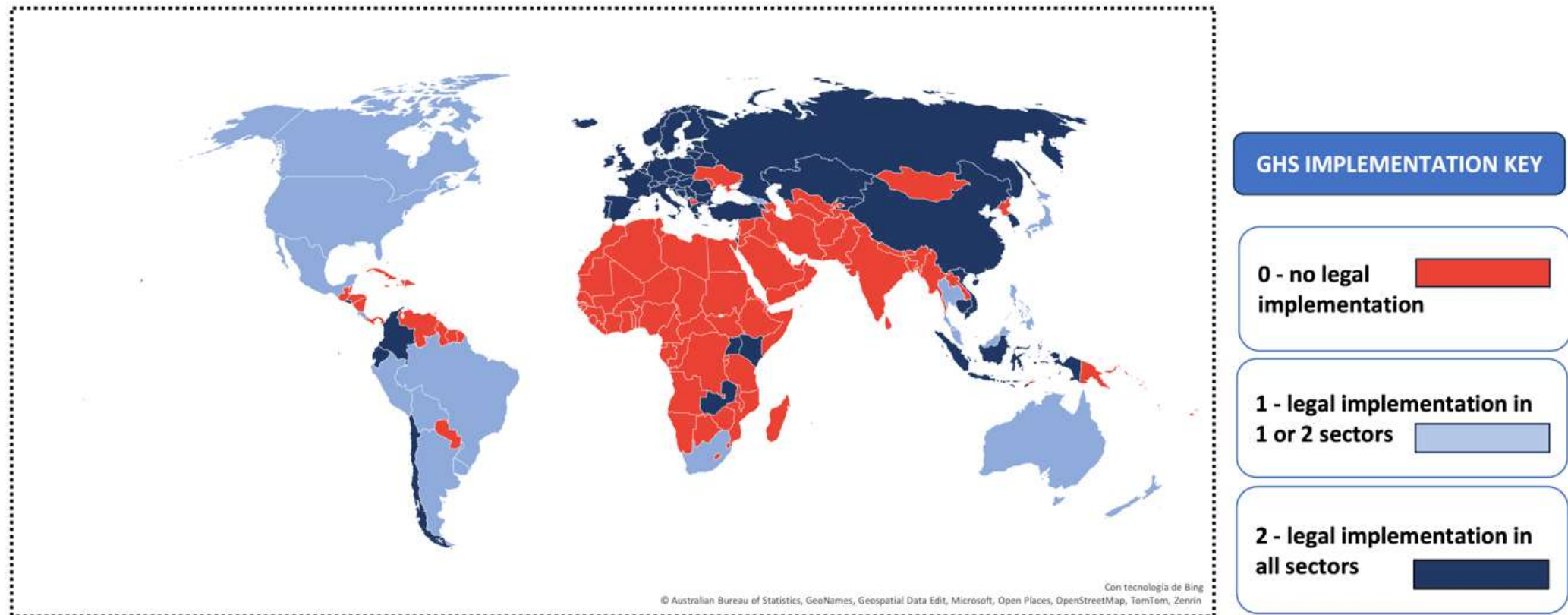
Bonn, Germany, 25 - 29 September 2023

An agreed target:

B6 – By 2030, all Governments have implemented the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) in all relevant sectors as appropriate for their national circumstances.

The GHS globally

The GHS is still **not operational in more than 120 countries**, mostly developing countries and countries with economies in transition.



UNITAR and the GHS



UNITAR and the GHS

National Activities:

- Last ~20 years, supported multiple countries in developing national implementation strategies
- Directed support for drafting of legislation
- Upcoming support to Benin, El Salvador, Honduras, Pakistan and Panama on GHS legislation/roadmaps

Regional Activities:

- Work in multiple regions, such as ASEAN, to develop regional approaches and coordination
- Work with UNEP and the Gulf Cooperation Council to update the 2002 guidelines for the management of chemicals; GHS and chemical accidents
- Work with UNEP (in an EU and ICCA financed project) in Kenya, Nigeria, Ghana and Cote d'Ivoire on the GHS

UNITAR's support – building on past work

- Co-lead of the Global Partnership to Implement the GHS, with the ILO and OECD, and a range of coalition partners: Governments, regional organisations, private sector, trade unions, academics and NGOs;
- Activities for training and awareness raising, developing implementation strategies, and supporting the drafting and review of legislation



UNITAR and the GHS

E-Learning course: UNITAR has successfully run an online GHS course over the past 10 years; technical understanding of the GHS

- English, French and Spanish available, run twice a year, each March/April and September/October (<https://www.unitar.org/event/event-pillars/planet>)





UNITAR and the GHS

A great deal of resources available for stakeholders to be benefiting from:

- Lessons-learned
- Implementation experience, guidance and advice
- Access to data and information (including knowing where to find it)

Making use of information that already exists can be significantly helpful in designing development activities

UNITAR and the GHS

New resources available:

Key elements of an implementation roadmap (UNITAR)

Lessons-learned (UNITAR)

Legislation guidance (UNITAR)

Model legislation (UNITAR)

The GHS and trade (UNITAR)

The GHS in the world of work (ILO)

Introduction to the GHS (4 presentations and 4 leaflets)

Introduction to the GHS (2 videos)



UNITAR and the GHS

TRAINING MATERIALS

These training materials have been produced with financial assistance from Sweden, through the Swedish Chemicals Agency.

These leaflets are part of a series of leaflets and presentations on the GHS with the following topics: 1) What is the GHS and available data on substance classification.

Please also have a look at the four presentations on the GHS for further details and explanations. We also recommend you have a look at the two short introductory films on the GHS.

[↓ GHS_LEAFLET 1_ WHAT IS THE GHS.PDF](#)

[↓ GHS_LEAFLET 2_HAZARD CLASSIFICATION.PDF](#)

[↓ GHS_LEAFLET 3_HAZARD COMMUNICATION.PDF](#)

[↓ GHS_LEAFLET 4_IMPLEMENTING THE GHS AND AVAILABLE DATA ON SUBSTANCE CLASSIFICATION.PDF](#)

These training materials have been produced with financial assistance from Sweden, through the Swedish Chemicals Agency.

These presentations are part of a series of leaflets and presentations on the GHS with the following topics: 1) What is the GHS and available data on substance classification. 2) Hazard classification. 3) Hazard communication. 4) Implementing GHS and available data on substance classification.

Please also have a look at the four leaflets on the GHS. We also recommend you have a look at the two short introductory films on the GHS.

[↓ POWERPOINT PRESENTATIONS.ZIP](#)

FILM 1 PART I

This short video (part I and part II) introduces the Globally Harmonized System of Classification and Labelling (GHS) and provides information about the origins and development of the GHS, purpose and benefits, elements of the GHS, the building block approach, and considerations and guidance when implementing the GHS.



FILM 1 PART II



UNITAR webpage



Visit our webpage

<https://unitar.org/sustainable-development-goals/planet/our-portfolio/globally-harmonized-system-classification-and-labelling-chemicals>

A decorative border on the left side of the slide, featuring a repeating pattern of red diamond shapes. Inside each diamond is a white GHS hazard symbol, including symbols for flammable, corrosive, toxic, explosive, and other hazards.

GHS – roadmap

**How does
Pakistan want to
implement the
GHS?**

Stakeholders

Since the GHS system will affect practically all sectors of society it is important to involve **as many stakeholders as possible from the beginning**.

Decide who should be the **lead actor and the most important stakeholders**.

Which **sectors** are chosen for GHS implementation can affect who is to be involved

Awareness is also important- education ministry? Include in academic curricula? A role for NGOs?



Role of the Competent Authority (CA) and flexibilities in the GHS

Many important stakeholders working together to achieve sound chemicals management.

The **most important is the body** that is given the responsibility to **implement, maintain and enforce the regulations.**

Due to the broad impact that chemicals have on practically all areas of society, **important to establish who is the CA.** Citizens, workers, companies and organisations need to know who to turn to with their questions or concerns.

The GHS comes with certain “flexibilities” at the discretion of the CA – *how should Pakistan take these into account?*



National GHS coordinating committee

Form a national GHS coordinating committee (or create a GHS subcommittee within a larger relevant national management committee, if one exists), along with any necessary subcommittees (e.g. sectoral working groups for industrial workplaces, agriculture, transport and consumer products; stakeholder subcommittees; or cross-sectoral working groups).

Legislation approach

1) Industrial code of conduct or 2) standard

“Legislation is the **backbone** of GHS implementation.”

Parts of the GHS needs to be **consistent and long-term**: other parts need to be **adjusted on a regular basis** .

Depending on the national context different models can be used but all of it needs to be **easily available, enforceable and transparent**.

Implemented by **law or standards or a combination of these**. Decide what should be stated in regulations that need to be consistent over time (e.g. responsibilities, definitions) versus regulations that may need to be changed quickly (e.g. criteria).

- Since science and knowledge about chemicals constantly change, the chosen implementation method **must be adjustable without too much delay**.

Consider: **transition periods**, how to **refer to the purple book**, which **sectors** the legislation will relate to and if a certain **ministry/ministries** **will maintain overall control**.

Important for stakeholders to consider what is in place already, what needs to be amended, and what can/should be developed from scratch

Sectors affected

“Traditional” sectors are: the workplace, agrochemicals, consumer products and transport.

Governments may consider implementation sector by sector;

- some sectors often have existing legislation, enforcement and approval systems running and may be ready to adopt a new system quickly, e.g workplace or pesticides.
- starting with some sectors can act as an example and facilitate smoother implementation for other sectors.
- at the same time, this might delay the overall implementation since each additional sector will require changes of legislation.

Responsibilities

Deciding who should be **responsible** is crucial to achieve effective implementation.

Where the **burden of proof** falls needs to be established; who should **guarantee** that a chemical substance, mixture or article containing chemicals is **properly classified & labelled**.

Where a government decides to put the responsibilities for chemical handling will determine **who needs to evaluate data, classify and label the products and distribute information**. In cases of **violations**, this will then determine who will be charged and the process to follow.

Enforcement

Enforcement helps to **ensure efficient implementation** and understand **what parts of the legislation are working**

Fundamental in securing **effective & fair implementation** of the rules.

Also gives legislator **feedback** to ensure that measures are working and **develop trust** among those using the GHS system (e.g. the private sector) that a sustainable, reliable system is in place.

Establish an organisation for **inspection** and **secure funding**

May choose to have a **separate function** that focuses on inspection

- **Independence** – avoids pressure to act/not act, and clear where to turn for complaints/issues

Definitions and key terms

In the GHS purple book, **definitions** and abbreviations cover five pages. By defining the **most important elements of GHS** early in the process relevant stakeholders will have a **clearer understanding** and can consider further their role and responsibilities.

Make a **list of the definitions and abbreviations** that should be included within the legislation. If possible, use **as much from the GHS purple book** (supports **global harmonisation** and **saves time**).

Where relevant, definitions may also be **aligned with existing pieces of legislation**, such as chemicals legislation, biocides, cosmetics, and others.

Transition periods

To establish a new and complex system is challenging for all

New responsibilities and work are established for both the private sector and the government

Sometimes it also means **phasing out/ transferring from an old system**, and establishing how long the old one is valid for

To handle the introduction of GHS everyone will need **time to adjust, change industrial processes and train** both staff and the public

While **transition times will inevitably delay the final and whole implementation of GHS**, it can serve to provide all stakeholders with an agreed timeframe within which to transition to the GHS and for all users to learn to process the information



GHS version, updates and acceptance of other versions

The GHS itself is regularly updated, by custom, every two years

While often revisions include small updates, some are more substantial

It is important to consider:

- what edition Pakistan will implement (region, neighbours, trading partners, global trends...)
- how to accept labels and SDSs that conform to other (older or newer) revisions, e.g. from imports
- how will Pakistan update its GHS version (or not)



Roadmap process

What has been done before?

Examples of Ecuador and El Salvador

Writing process

Next steps in this workshop

Next steps in general



GHS – roundtable discussions



Guiding questions – workplace, agriculture, consumer products

1. What is currently in place in practice in relation to hazard classification and communication in the sector?
2. Which stakeholders or actors need to be included to ensure comprehensive development of the GHS strategy?
3. What needs to be in place to facilitate GHS implementation in the sector?
4. Would you see any benefits/disadvantages to an overarching law on the GHS covering all sectors?
5. What is already being done in the country that the GHS can benefit from e.g. Government, private sector, FAO, ILO, UNIDO initiatives
6. How do we increase commitment? Declarations, commitment of resources, other...

