Weaving circularity into the textile industry:

A systemic approach to enable value creation from garment manufacturing waste in India

Problem context & approach

What possible ways can we create value from textile waste and how can these activities be enabled?

This project aimed to address the textile waste problem in India by exploring ways to create value from textile waste and how these activities can be enabled. The project placed a focus on the context of cotton-based textile waste generated by first-tier garment manufacturers in India.

Systemic design was employed to approach the project. Analysis of the system yielded insights on stakeholders, (value creation) activities, material flow, as well as barriers and drivers of value creation within it. Leverage points were further (co-)identified to discover where interventions may be placed in the system.

Key insight & direction

How might (potential) value creators with existing motivations become trailblazers towards a future where circular waste value chains become the status quo?

Analysis of the system revealed that value creation is already largely taking place, but not optimally supported by the structure of the system (e.g., low supply and demand, infrastructure). Meanwhile, as frontrunners of circularity, value creators collectively possess the potential to shift the current system. However, limited information on the textile value chain and practical implementation of circularity become fundamental obstacles in undertaking actions from a system lens.

Proposed intervention

A knowledge base intended to provide information on the textile value chain in a way that enables (potential) value creators to develop informed circular actions from a systems lens
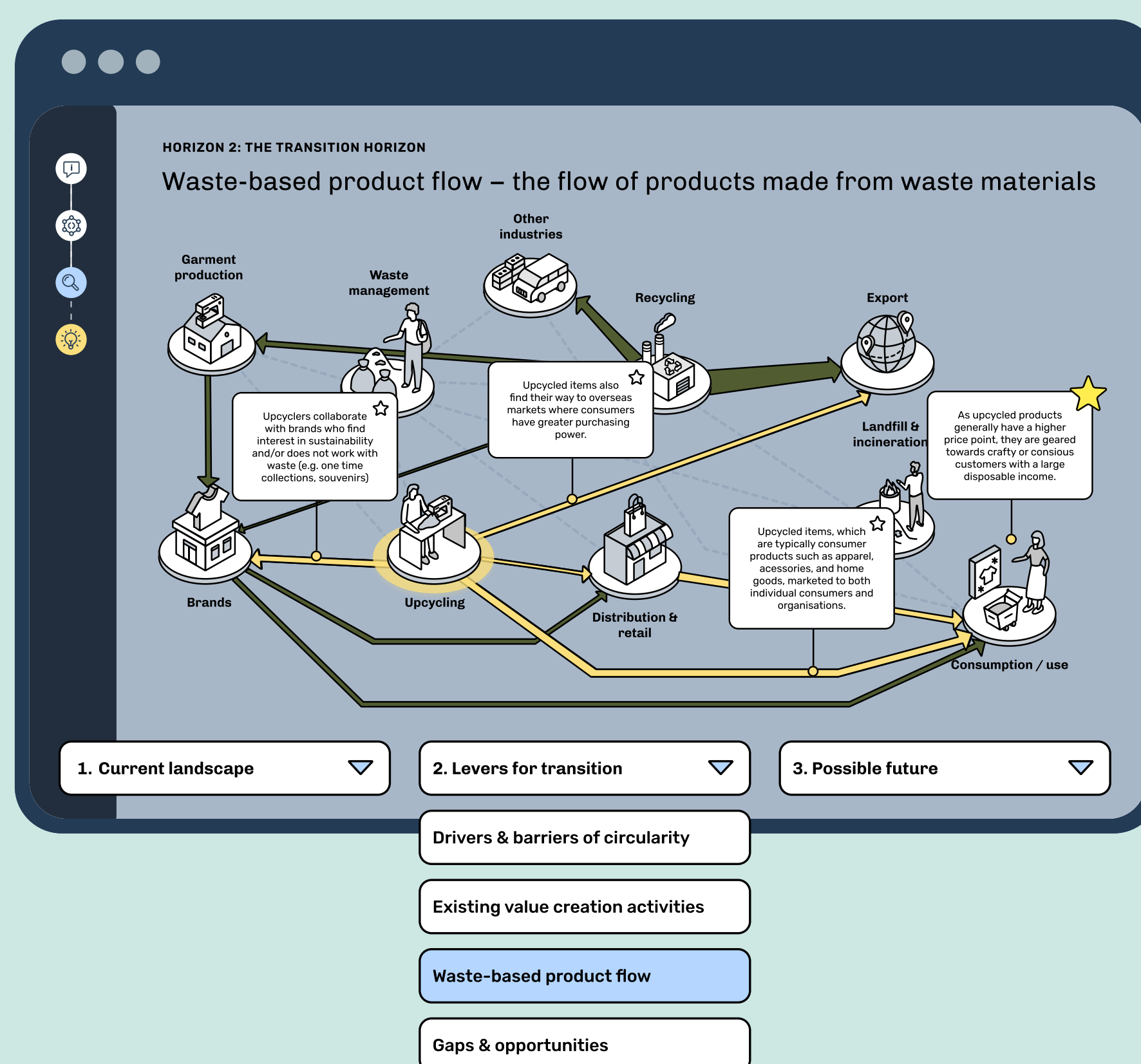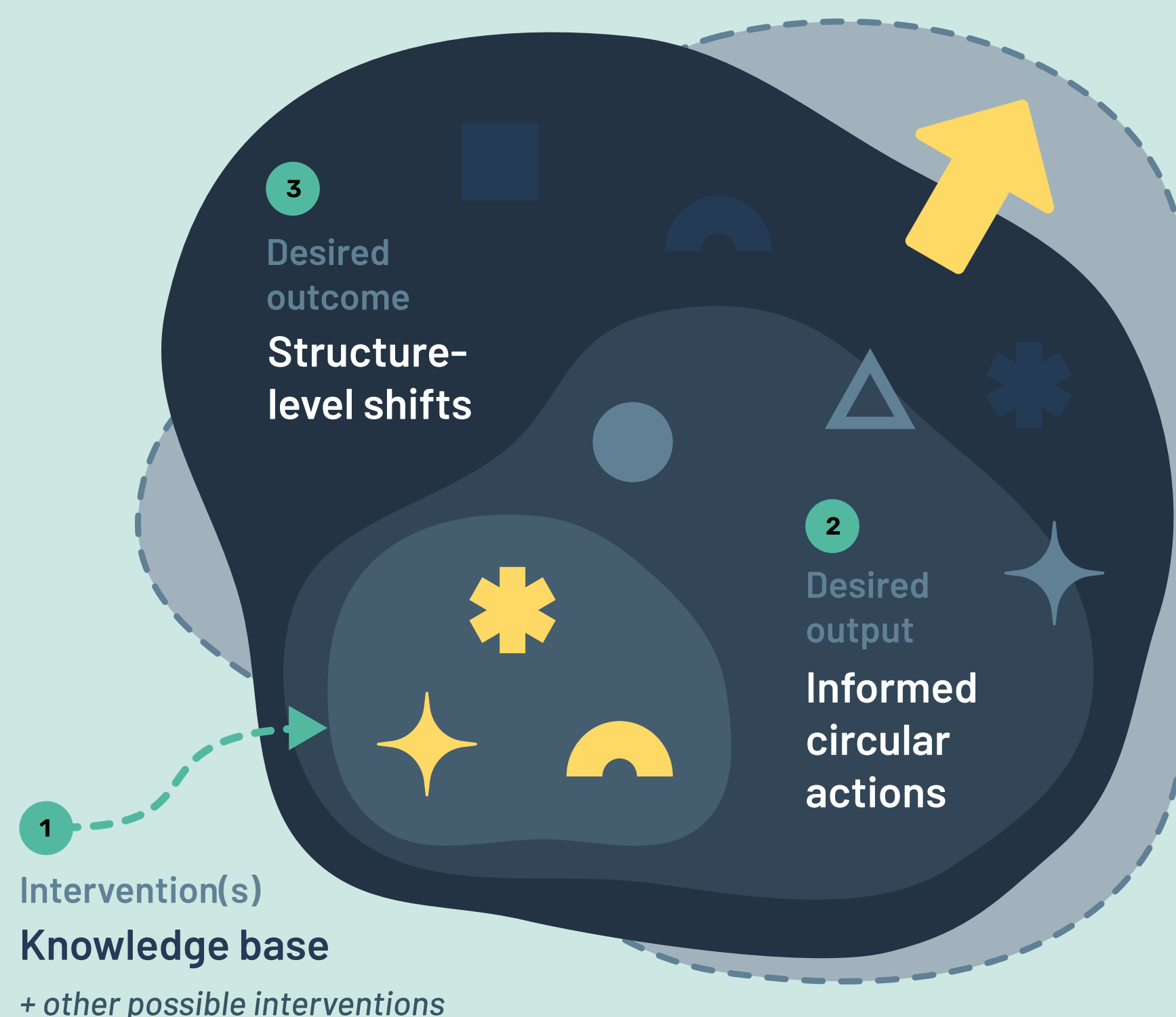
The proposed intervention was intended to close knowledge gaps on circularity and the textile value chain in India. It is targeted towards (potential) value creators with an existing motivation to create textile waste solutions.

Building an understanding of how they fit into the ecosystem may create a broader view of barriers that they may face and opportunities on how to solve them from a systems lens. The Three Horizons framework provides the structure for communicating information to the audience and facilitates them in identifying ideas for future actions.

4 Desired direction
Circular waste value chains as the predominant practice

3 Desired outcome
Structure-level shifts

2 Desired output
Informed circular actions

1 Intervention(s)
Knowledge base
+ other possible interventions

Conclusion

While the proposed intervention offers a promising foundation for knowledge building, there is room for more interventions to be placed alongside it to effectively enable value creation

The output of the project provides a starting point in developing an intervention to enable value creation activities, and lays down an avenue for other possible interventions to be developed. By applying theory on circularity to the practical context of India, this project contributes to the enrichment of knowledge on (a subset of) the Indian textile value chain, which is presently limited.

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29 August 2022
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