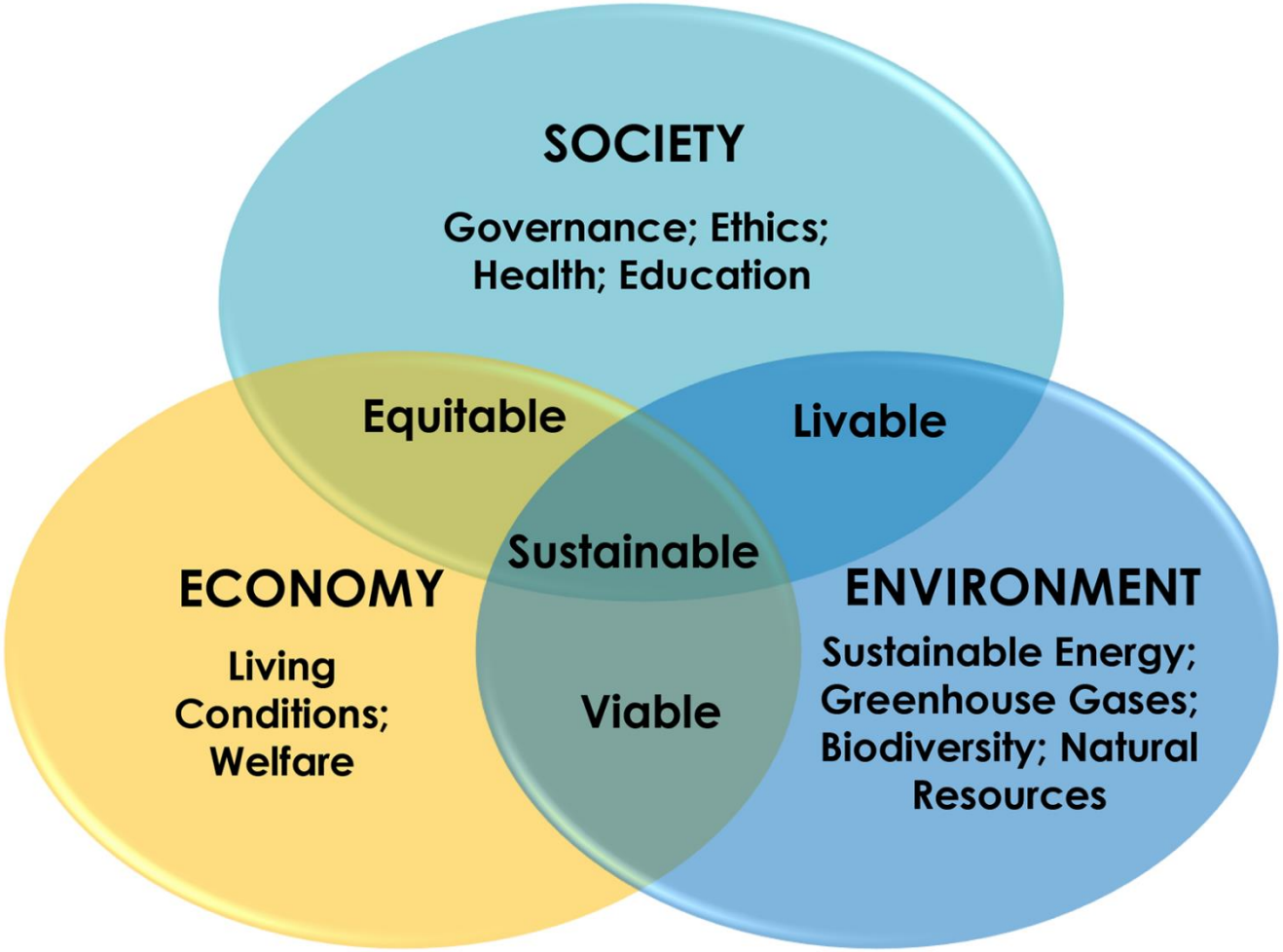
PIANC

The World Association for Waterborne Transport Infrastructure

SUSTAINABLE INLAND WATERWAYS

A Guide for Inland Waterway Managers on Social and Environmental Impacts



InCom Working Group Report N° 203 – 2023

PIANC REPORT N° 203

INLAND NAVIGATION COMMISSION

SUSTAINABLE INLAND WATERWAYS

A Guide for Inland Waterway Managers on Social and Environmental Impacts

March 2023

PIANC has Technical Commissions concerned with inland waterways and ports (InCom), coastal and ocean waterways (including ports and harbours) (MarCom), environmental aspects (EnviCom) and sport and pleasure navigation (RecCom).

This report has been produced by an international Working Group convened by the Inland Navigation Commission (InCom). Members of the Working Group represent severalcountries and are acknowledged experts in their profession.

The objective of this report is to provide information and recommendations on good practice. Conformity is not obligatory and engineering judgement should be used in its application, especially in special circumstances. This report should be seen as an expert guidance and state-of-the-art on this particular subject. PIANC disclaims all responsibility in the event that this report should be presented as an official standard.

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EXECUTIVE SUMMARY

This PIANC report of InCom WG 203 is targeted at those responsible for the management of inland waterways (IW). The paper focuses on increasing the social and environmental awareness of managers responsible for operating and developing IW. This report also addresses the opportunities and challenges for inland waterway managers resulting from the multiple functions and uses of the waterways. This report also provides inland waterway managers with a general guide to the global process of generating and creating more sustainable development in society. In addition, it provides practical lessons for inland waterway managers by using case studies with examples for 'Best Cases' presenting projects that were considered to have successfully implemented sustainable solutions and a 'Lesson Learnt' project that did not meet many of its intended objectives.

This report describes the concept of incorporating Corporate Social Responsibility (CSR) into the culture of public inland waterway organisations. CSR is relevant to all inland waterway infrastructure development, including maintenance and operations. Applying CSR to inland waterway projects generates additional benefits for all of society. Incorporating CSR into an organisation's workflow by using the multifunctionality of IW as a baseline can improve outcomes and increase efficiencies. Using CSR means an organisation will consider multifunctionality of IW including participation of all stakeholders and integration of all the various perspectives and needs for a project.

The report presents seven case studies that include one that offers lessons learned and six that provide recommendations for IW managers that are consistent with sustainable operations and maintenance of IW projects:

BEST PRACTICES

Case study 1:	The Panama Canal: A Success Story of a Sustainable Waterway
Case study 2:	Enhancing Existing Infrastructure at the Redman Point–Loosahatchie Bar Environmental Project near Memphis, Tennessee, USA
Case study 3:	The Sigma Plan Flood Protection, Belgium
Case Study 4:	Enhancing Existing Infrastructure at a Small Waterway in the Northern Part of Germany
Case study 5:	Modernisation of the Scheldt Section Crossing Tournai, Belgium
Case study 6:	Sustainably Managing the Chesapeake and Ohio Canal National Historical Park (NHP) in Maryland, USA

LESSONS LEARNT:

Case Study 7:	Mississippi River Gulf Outlet, Louisiana, USA: Example of an Unsustainable Waterway