

# Storm water handling and flood prevention for community leaders

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## CONCEPT

Many Informal settlements experience issues with flooding due to seasonal rain. This has strong negative implication on way of life and also has negative impact on the environment. In certain situations the problem can be alleviated by managing runoff/storm water in the local area.

Sustainable interventions should involve the municipality and/or the local community but due to e.g. the informal nature of the settlements the municipality cannot always get involved.

The purpose of this project is to compile a manual of flood prevention/alleviation interventions that can be executed by the communities in the informal settlements.

The manual restricts itself to simple solution and to a large extent adopts the ideals of SUDS. Thus this manual will not only help to prevent the negative environmental impacts of flooding but it will help to implement more sustainable ways to handle storm water.

Where possible the water will be used to recharge groundwater, grow greenery and supply household with water collected from rooftops. Any solution will be under close scrutiny as to it not causing environmental harm (e.g. contaminates groundwater) or harm to way of life.

## BACKGROUND

The manual is intended for Shack Dwellers International (SDI) which is an organization that manages networks of Shack dwellers on a world-wide basis. If the manual is found to be successful it can be recompiled and redistributed to other organizations. The manual is being written as a project under Engineers Without Borders (EWB) in Cape Town. The manual is DTU project work of David Jonathan Jensen.

## MANUAL OUTLINE

The manual will be 8 to 10 pages easily understandable and illustrated. It will be translated into relevant languages (Xhosa, Africans)

**Page 1:** Information on why it is important to make interventions against flooding. This information is intended to invoke community leaders to get projects going. It is also of use for community leaders when looking to get the entire Community involved.

**Page 2:** Background on why flooding occurs in form of understandable theory on storm water and runoff. This information will be presented in relation to informal settlements

**Page 2-4:** An introduction to a project cycle and which steps to take before construction of an intervention.

**Page 4-10:** Contains the DIY (Do it yourself) manual part and will be very much like any other handyman manual.