

Global demand for freshwater is projected to grow by 55% between 2000 and 2050. This poses a huge risk for increased competition over water from different users.

A Sustainable Development Goal (SDG) on water is a unique opportunity to holistically address our world's water related challenges, avoiding potentially fragmented and unsustainable solutions which can increase competition between different water users.

HEALTH

SUSTAINABLE
GROWTH

AGRICULTURE

ENERGY

CLIMATE

THE EFFECTS of climate change impact the agricultural sector, specifically increased competition over resources and extreme, increasingly unpredictable water patterns. Global food and water security depends on the agricultural sector achieving greater water efficiency and sustainability.

WHAT IS HAPPENING NOW?

Rainfall and snowmelt patterns that affect the water cycle are being distorted by our changing climate. Simultaneously, demand for finite and irreplaceable water resources is booming. It is estimated that by 2050, 70% more food will be needed to meet the growing global population's dietary demands. Today 800 million people are undernourished. They also predominantly come from the same underprivileged communities who lack safe sanitation. As a large and relatively inefficient water user, the agricultural sector holds a major key to unlocking the global water demand dilemma.

WHAT NEEDS TO HAPPEN NEXT?

The effective and sustainable use of fresh water is critical to achieving global food security. Major changes across the entire food production chain and in consumption behaviour are needed to ensure that available water resources are able to meet growing demands for food and other agricultural products. Improving and intensifying rainfed farming systems through conservation agriculture, including soil moisture management as well as increasing water productivity in irrigated farming systems are key elements.

► Watch SIWI's five thematic films

and corresponding Stockholm Statements on Water to learn more about the centrality of water in building resilient future societies.

www.siwi.org/stockholmstatement2014



A Sustainable Development Goal

(SDG) on Water is
essential for our shared future

What would an SDG mean for Agriculture?

A dedicated SDG on water will facilitate coherent decisions on how to best share water between users, helping to provide a stable and sustainable supply of global food resources.

FACTS

- **THERE IS NOT ENOUGH GROUNDWATER** available on current croplands to produce food for the expected population in 2050.
- **THE TOTAL AMOUNT OF WATER** available for irrigation globally is projected to decrease by around 350 km³ (15%) between 2000 & 2050, as demand for freshwater grows in other economic sectors.
- **RAINFED AGRICULTURE** is the world's predominant agricultural production system, but also hosts the majority of the rural poor. Yields in rainfed systems are little more than half the achievable potential in many low-income countries. Where rainfall is inadequate, agricultural production is expected to be constrained more by water scarcity than land availability.
- **RESEARCH IN INDIA** has demonstrated that shifting from conventional surface irrigation to drip irrigation increases yields and reduces water use dramatically, producing up to 4 times crop per drop.