Opportunities for employment growth and decent jobs are contingent upon the sustainable management of water resources and the provision of water-related services.

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22 March 2016, ILO Headquarters, Geneva, Switzerland
Section ONE

WATER-DEPENDENCY OF JOBS
WATER-DEPENDENT JOBS

AGRICULTURE
FORESTRY
FISHERIES
ENERGY
RESOURCE-INTENSIVE MANUFACTURING
RECYCLING
BUILDING
TRANSPORT
HEAVILY/MODERATELY WATER-DEPENDENT JOBS

42% of GLOBAL WORKFORCE

36% of GLOBAL WORKFORCE

Global employment trends, by sector and age

- **Services**
  - Female
  - Male

- **Industry**
  - Female
  - Male

- **Agriculture**
  - Female
  - Male

Number (Billion)

- 3.5
- 3.0
- 2.5
- 2.0
- 1.5
- 1.0
- 0.5
- 0

2014
Three out of four jobs that make up the entire global workforce are water-dependent.
Section TWO

WATER SCARCITY LIMITS GROWTH
ADDRESSING WATER SCARCITY LOWERS THE RISKS FOR JOBS (I)

Annual average water withdrawals-to-availability ratio

- 0 – 0.1 (no water stress)
- 0.1 – 0.2 (low water stress)
- 0.2 – 0.4 (mid water stress)
- more than 0.4 (high water stress)
- no data
ADDRESSING WATER SCARCITY LOWERS THE RISKS TO JOBS (II)

Economic water scarcity – whereby access is not limited by resource availability, but by human, institutional and financial constraints – affects employment opportunities for a large swath of the global population, particularly in the least developed countries of Africa, southern/southeast Asia, and Latin America.
FOLLOW-ON EFFECTS OF WATER SCARCITY

- Drought
- Lower agricultural productivity
- Unemployment
- Migrations

Secondary Effects:
- Food insecurity
- Food import dependency
- Informal settlements
- Unemployment
- Social unrest
Section THREE

ADDRESSING GAPS AND INEQUALITIES
Making sound policy decision needs better insights and robust metrics regarding

1) the current and future **state of water resources** and demand, and
2) the **work reality** including informal, part-time and unpaid work.

Data needs to be **disaggregated** with respect to gender, geography, income, ethnicity, culture, religion etc.
For example, a study conducted in nine least developed countries showed that 787,200 trained water professionals would be needed to achieve universal coverage in water and sanitation.
FIGHTING INEQUALITY FOR WOMEN’S EMPOWERMENT AND DECENT JOBS

Women often occupy undervalued, low-paid/unpaid and unrecognized jobs.
Section FOUR

INVESTING IN WATER, IS INVESTING IN JOBS
CREATING AND SUSTAINING ‘WATER JOBS’ ENHANCES THE MULTIPLIER EFFECT

- **Direct jobs**: Jobs created at a recently-built water treatment plant.
- **Indirect jobs**: Jobs resulting from increased consumption by employees in direct/indirect jobs.
- **Induced jobs**: Jobs at chemical plant producing products for the water treatment plant.
- **Growth-related jobs**: Jobs resulting from macro-benefits such as improved infrastructure.

**CREATING AND SUSTAINING ‘WATER JOBS’ ENHANCES THE MULTIPLIER EFFECT**
THE MULTIPLIER EFFECT OF INVESTING IN WATER

Investments in infrastructure and operations of water-related services can provide high returns for economic growth and for direct and indirect job creation.

Investing **US$1 million** in water supply and sanitation infrastructure:

- **10-26 jobs** in the USA
- **100 jobs** in Latin America
Access to safe and reliable water supply and sanitation services **at home, school and the workplace** is critical to maintaining a **healthy, educated and productive workforce** (and makes good business sense!)
BUT STILL TODAY ...
WATER IS A FUNDAMENTAL DRIVER FOR GREEN GROWTH
NEW OPPORTUNITIES through INNOVATION in a GREEN ECONOMY...

GREEN JOBS IN THE FUTURE

Scenarios

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Reference</th>
<th>Moderate</th>
<th>Best case</th>
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<tr>
<td>Jobs per year</td>
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<td>2030</td>
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AVERAGE EMPLOYMENT OVER LIFE OF FACILITY

Jobs per megawatt of average capacity

- Solar: 10
- Wind: 8
- Biomass: 6
- Coal fired: 4
- Natural gas fired: 2

... CREATE DECENT JOBS
US$1 million in alternative water supplies: 10-15 jobs

US$1 million in stormwater management: 5-20 jobs

US$1 million in urban conservation and efficiency: 12-22 jobs

US$1 million in environmental restoration and remediation: 10-72 jobs
TAKE-HOME MESSAGES FROM THE WWDR 2016

Opportunities for employment growth and decent jobs are contingent upon the sustainable management of water resources and the provision of water-related services

1. Three out of four jobs are water-dependent
2. Water scarcity and supply disruptions limit the growth potential for decent, high quality jobs
3. Sustainable water policies facilitate bridging knowledge and capacity gaps while reducing gender inequalities
4. Access to water and sanitation services is critical to maintaining a healthy and productive workforce
5. Investments in water infrastructure and ‘water jobs’ generate positive returns and have a multiplier effect on job creation across all economic sectors
6. The transition to a greener economy enhances opportunities for decent jobs
Better water, better jobs, better lives
Towards 2030 Agenda
THANK YOU

WWDR and side publications are available at:

www.unesco.org/water/wwap