



Supply chain water footprinting: emerging practice, benefits and limitations

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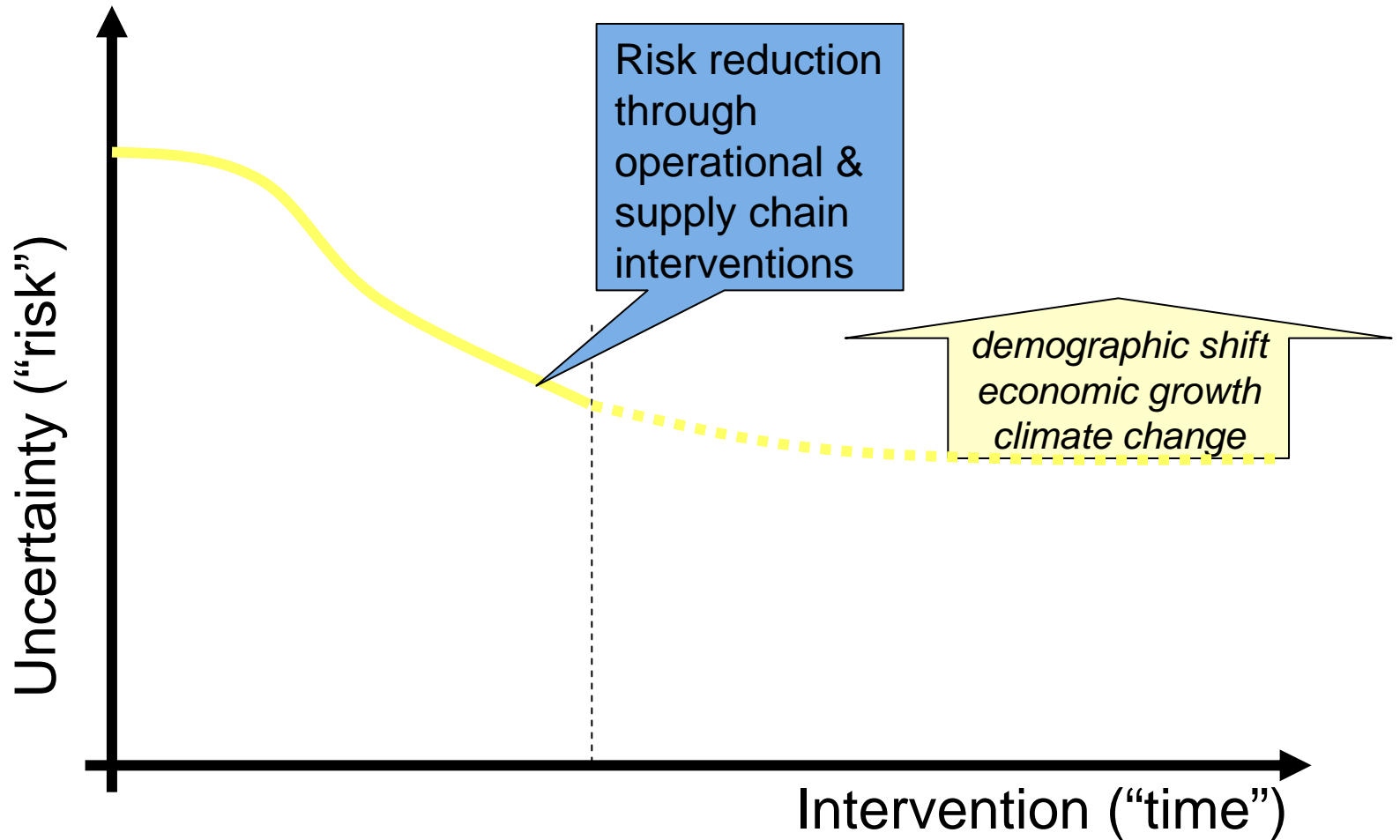


Supply Chain

- How much is unknown and what can be done?
 - Engagement and dialogue
 - Multiple and linked partnerships
 - Measures
- Defining where, how much and impacts
 - AWS, WFWG, Piloting
- What are the threats to supply and costs?
 - Regulatory and financial frameworks
 - Failing governance
- What is the policy environment around your supply chains?
 - Risk assessment
 - How much uncertainty can you live with



Responding to risk





Water footprint

- Total water use
- Operational: processing, dyeing, washing, packaging, containers, waste water
- Upstream: Supply chain embedded or 'virtual' water content
- Downstream: Consumer uses and disposal?
- Measurements and boundaries





WF tools...the first steps to stewardship

BWFtool.Version1.4.xlsm - Microsoft Excel

Home Insert Page Layout Formulas Data Review View Developer Add-Ins Acrobat Extools

Water footprint of a business

Step 1 - Internal Water Footprint

Business profile

Name Location
Country
Business type Region

Direct water use inventory

Water withdrawal (m³/year)

Blue water (surface and ground water)	Surface <input type="text"/>	Ground water <input type="text"/>	Total withdrawal <input type="text"/>	Change agreed water quality standards
Other sources	Rainwater harvesting <input type="text"/>	De-salination <input type="text"/>		

Waste water discharge characteristics

Discharge recipient	Quantity (m ³ /yr)	Pollutant concentration (mg/l)					Dilution volume (m ³ /yr)
		BOD	COD	TSS	Others	Name	
Surface (rivers/lakes)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Ground water	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Ocean	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Calculate IWF (Internal Water Footprint)

Blue WF m³/yr Total IWF m³/yr
Grey WF m³/yr

Clear **Cancel** **Step 2 - EWF (External Water Footprint)**

Note:
BOD (Biological Oxygen Demand)
COD (Chemical Oxygen Demand)
TSS (Total Suspended Solids)
Others (such as nitrate, phosphorus, pesticides etc)

Wireless networks found
Click to connect to a wireless network.

start Novell-delivered Appli... BWF tool Microsoft Excel - BWF... 16:26



WF tools...the first steps to stewardship

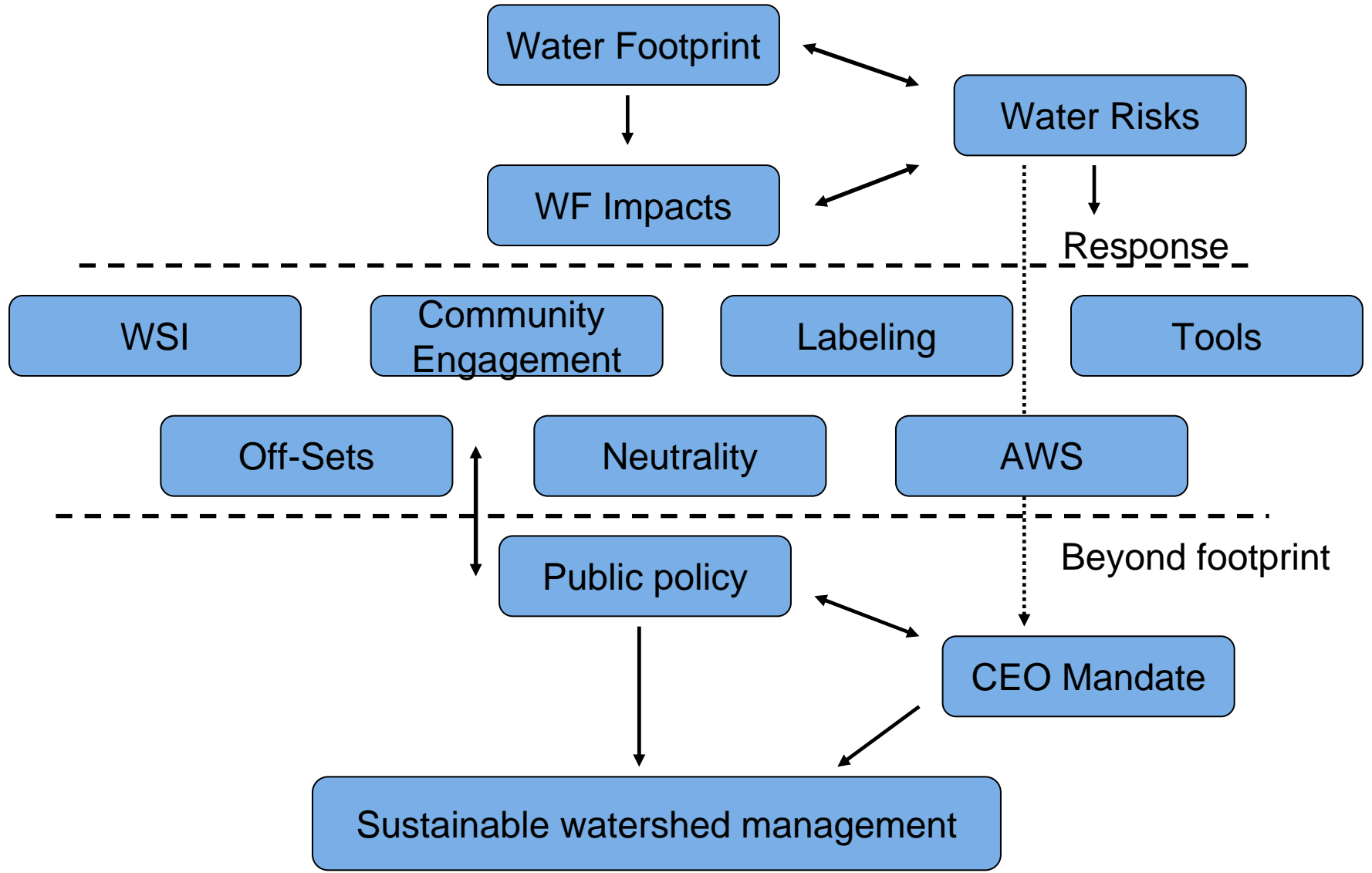
The screenshot displays the Microsoft Excel interface with a user form titled "UserForm1" overlaid. The form is titled "Step 2 - External Water Footprint" and is divided into several sections:

- Supply Chain:** This section contains four input fields: "Agricultural product group" (a dropdown menu), "Product discription" (a dropdown menu), "Quantity imported (ton/yr)" (a text input field), and "Country" (a dropdown menu). An "OK" button is located to the right of the "Country" field.
- Water Footprint Inputs:** Below the "Supply Chain" section, there are four rows of input fields, each followed by a unit "m3/yr":
 - Blue WF
 - Grey WF
 - Green WF
 - Total EWF
- Buttons:** A large blue button labeled "Calculate EWF (External Water Footprint)" is positioned to the left of the "Blue WF" input. At the bottom of the form, there are three buttons: "Clear", "Cancel", and "Step 3 - EWF (External Water Footprint)".
- Note:** A small text block at the bottom left of the form provides definitions: "Note: BOD (Biological Oxygen Demand), COD (Chemical Oxygen Demand), TSS (Total Suspended Solids), Others (such as nitrate, phosphorus, pesticides etc)".

The background shows the Excel spreadsheet with columns A-D and rows 1-27 visible. The taskbar at the bottom shows the "start" button and several open applications, including "Novell-delivered Appli...", "BWF tool", "Microsoft Excel - BWF...", and "Document1 - Microsof...". The system clock in the bottom right corner shows "16:27".



Addressing the supply chain - Footprint to Policy





Benefits

- Understanding volumes and impacts
 - Driving down impacts and risk
- Stewardship ethic
 - Credible and transparent approaches
- Links to impacts
 - Respond to impact not volumes
- Risk mapping
 - Where to intervene?
- Multi stakeholder responses
 - Credible and transparent platforms...sharing
- Common methods and language
 - Avoid wasting time and confusion



Limitations

- Data required from sectors
 - Poor knowledge of upstream and downstream
- Impact categories
 - Across sectors
 - Quantity and quality
- Low research and operational capacity
 - Investment required
- Lack of pilot studies
 - Across sectors
- Slow process
 - Multiple audiences
 - Confused language and mandate?