

# Pardee RAND FEW Index: WEF Security Indicators

$$FEW\ Index = \sqrt[3]{(Food\ Sub\_index) * (Energy\ Sub\_index) * (Water\ Sub\_index)}$$

Sub-Index	Measure
<b>Food security indicators</b>	
Food accessibility	<ul style="list-style-type: none"> <li>• Food Price level index</li> <li>• Share of dietary supply from nonstarchy food</li> </ul>
Food availability	<ul style="list-style-type: none"> <li>• Dietary food supply relative to Minimum dietary requirement</li> </ul>
<b>Water security indicators</b>	
Water accessibility	<ul style="list-style-type: none"> <li>• Percentage of population with access to improved drinking water</li> <li>• Percentage of population with access to improved sanitation</li> </ul>
Water availability	$\frac{\text{Municipal water withdrawal/Population}}{\text{Per capita water needs for human consumption}}$
Water adaptive capacity	<ul style="list-style-type: none"> <li>• Total water resources/Population</li> </ul>
<b>Energy security indicators</b>	
Energy accessibility	<ul style="list-style-type: none"> <li>• Electrification rate</li> <li>• Percentage access to modern fuel for cooking and heating</li> </ul>
Energy availability	<ul style="list-style-type: none"> <li>• Electricity consumption</li> <li>• Per capita electricity requirement/Population</li> </ul>