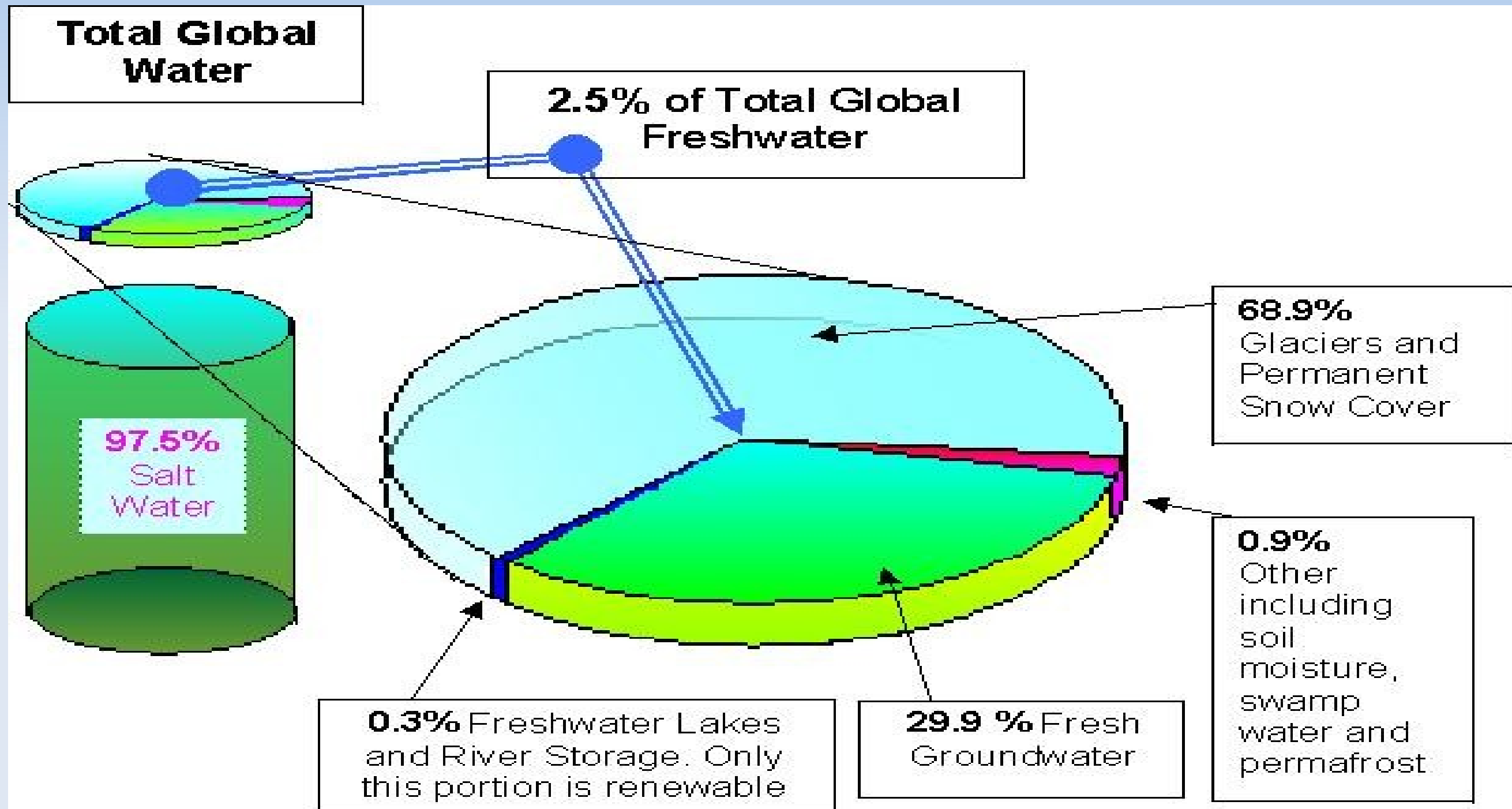


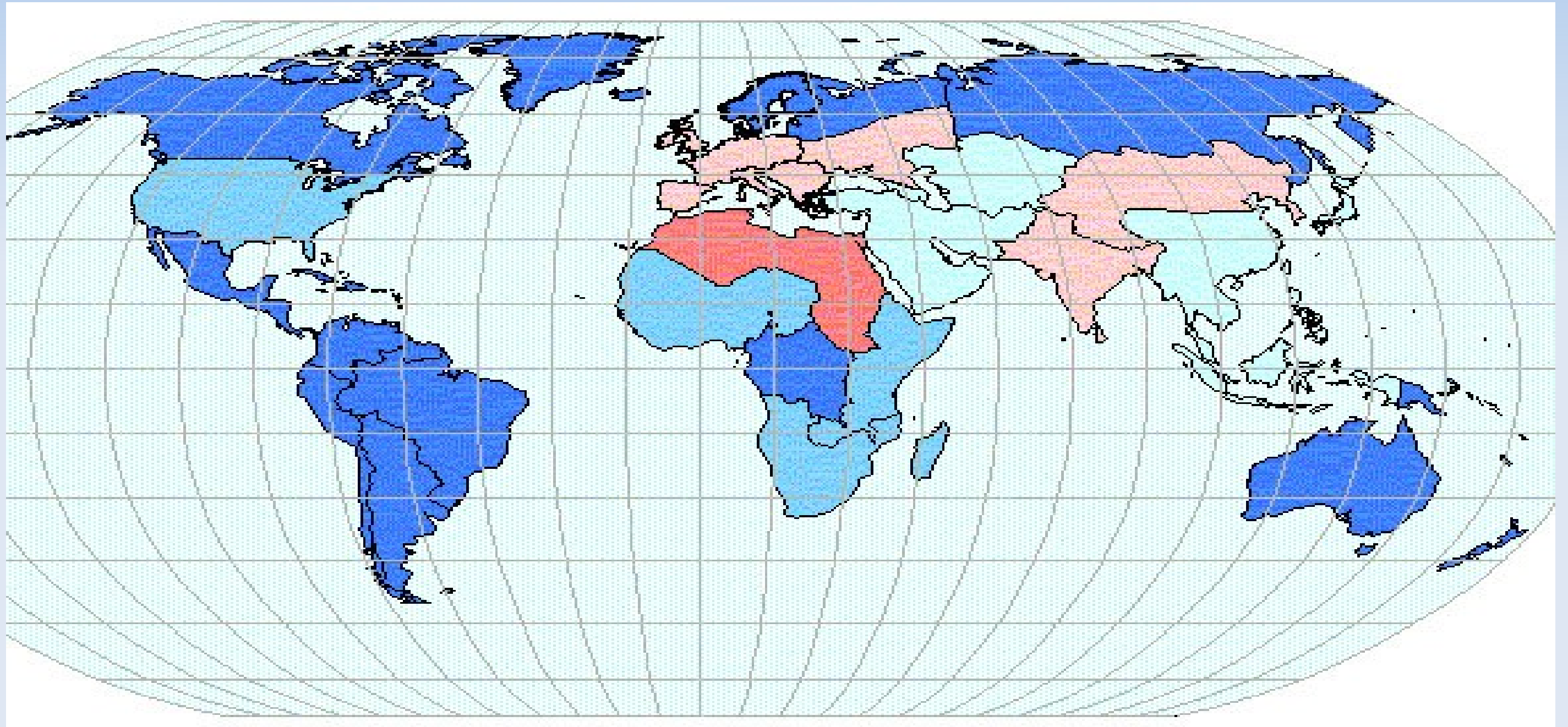
Women in Science = Better Science?



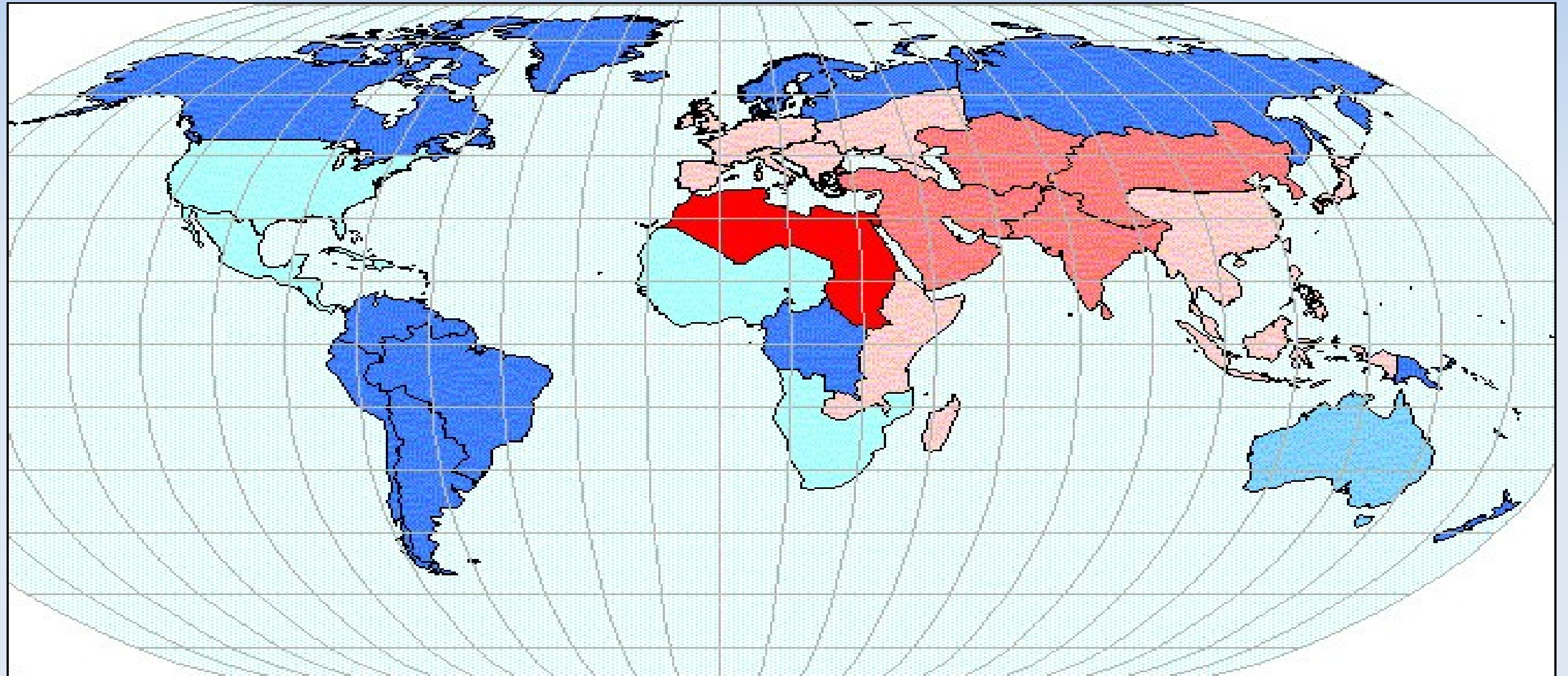
What is the problem?



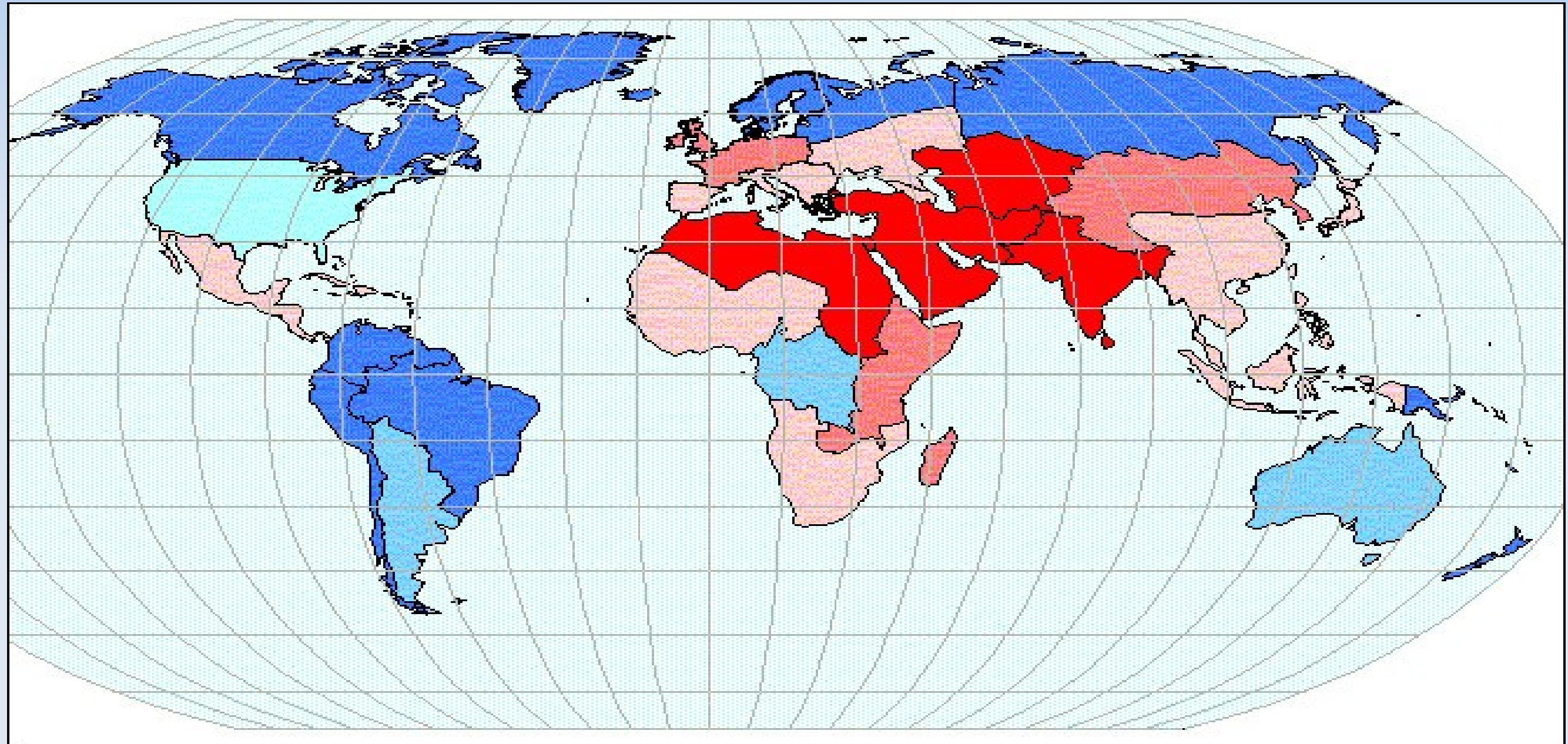
Why is this a problem? 1950



1995



2025



What is the problem?

66% Agriculture

20% Industry

10% Household

4% Evaporates

What are the clues? **Complexity**

Heterogeneous

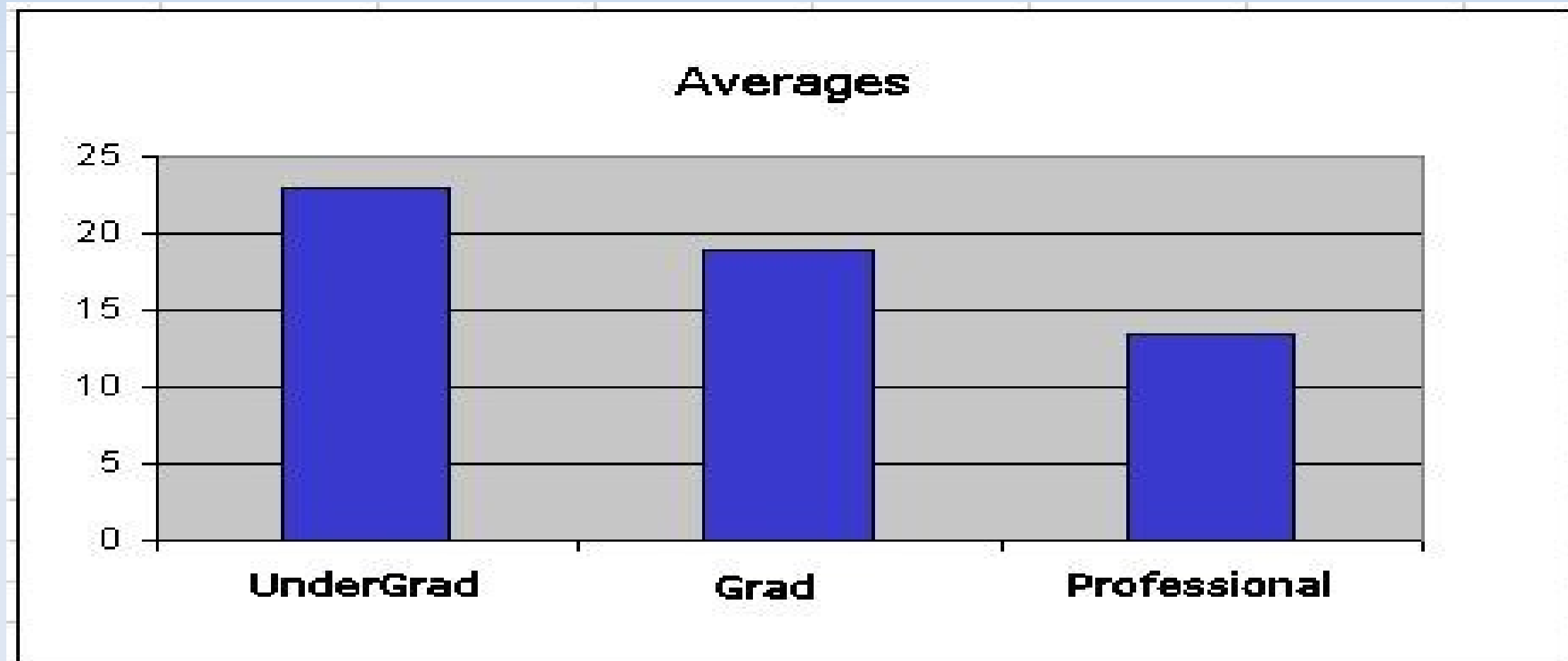
Many Length Scales

What are the clues?

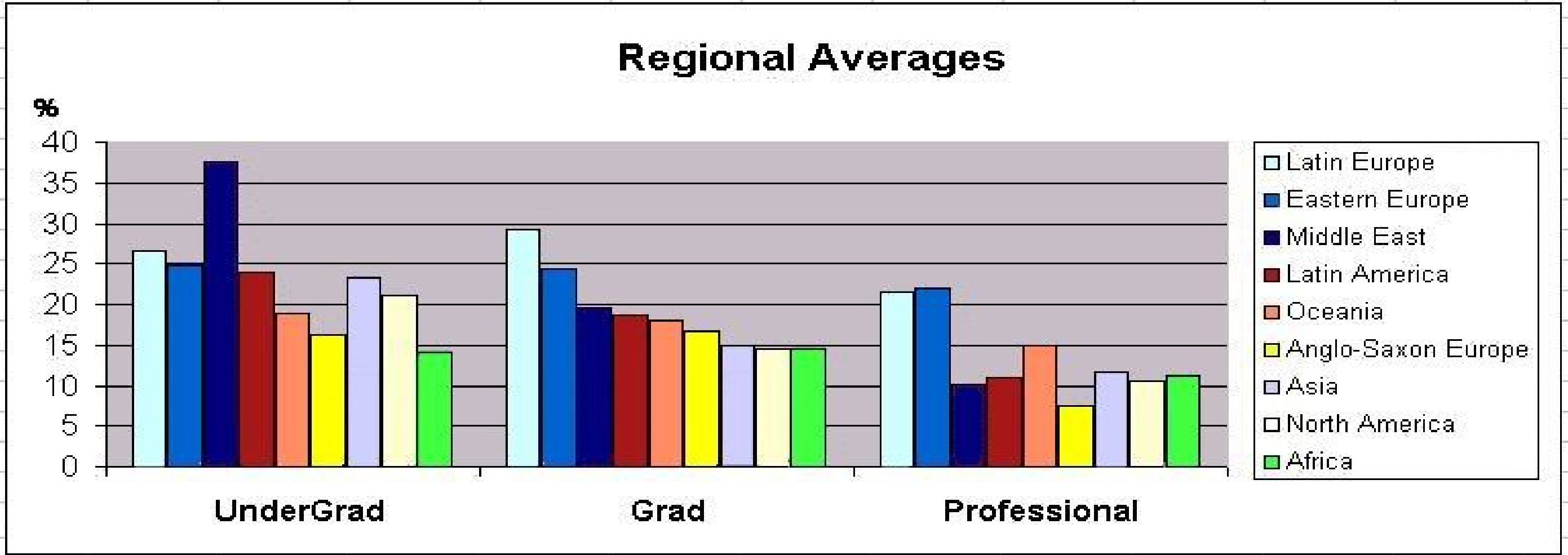
Better Management

Scientific Discovery

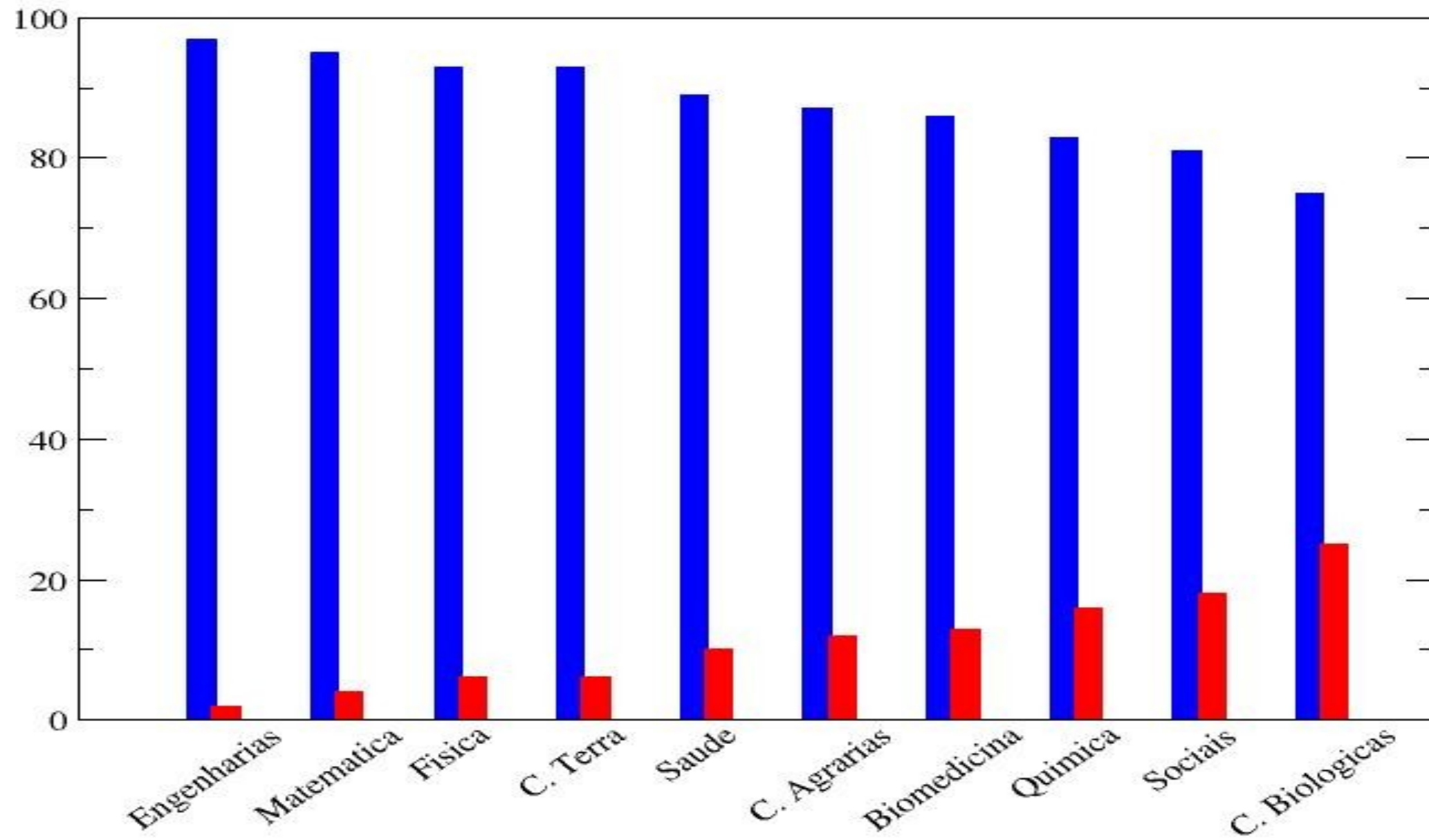
What is the problem?



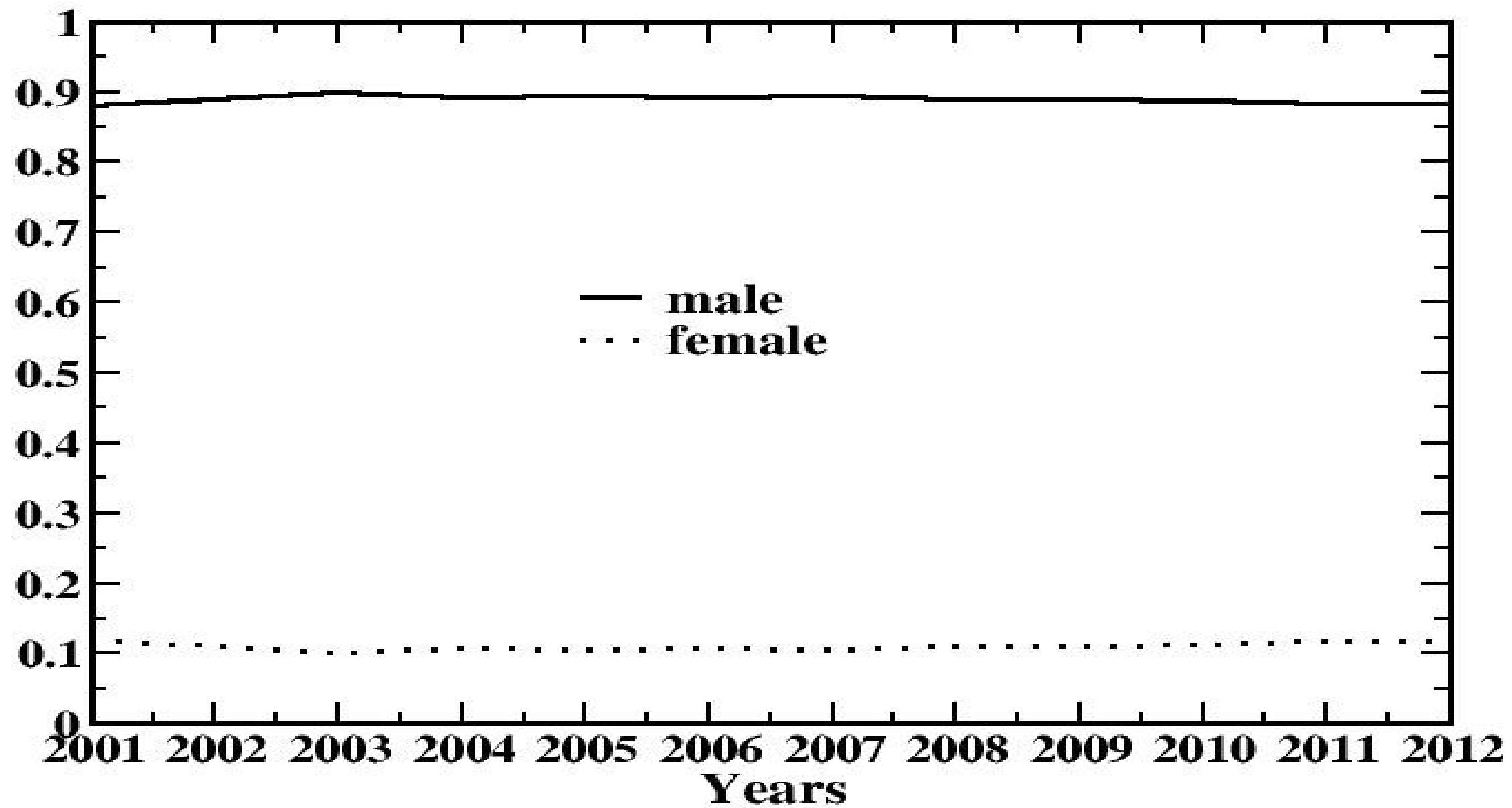
Regional Averages



Brazilian Academy of Sciences



Question of time?





WATER AND GENDER

IN AFRICA, **90%**
OF THE WORK
OF GATHERING WATER
AND WOOD IS DONE
BY WOMEN



Women and girls
often spend
up to **6 HOURS**
every day
fetching water



Reducing the distance
to a water source
from 30 to 15 min
**increased girls' school
attendance by 12%**
according to a study
in Tanzania

With the same access
to productive resources
as men, including water,
women could increase
yields on their farms by
20-30% and lift **150 million**
people out of hunger



Involving women
can **increase**
the effectiveness
water projects
6 to 7 times



Men and women participation

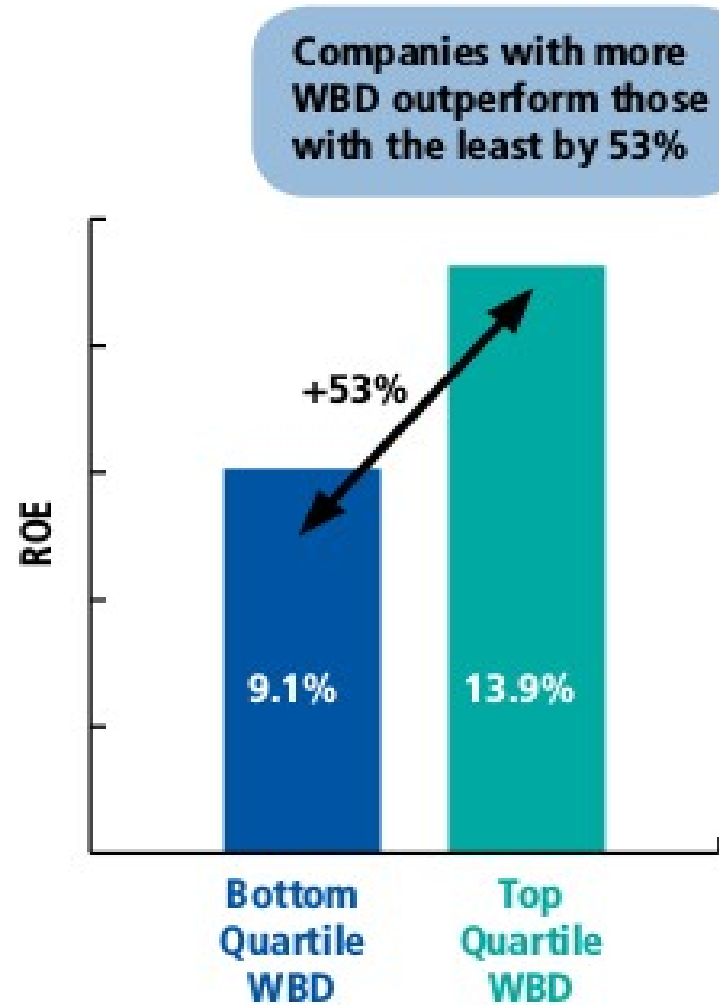


Men and women participation

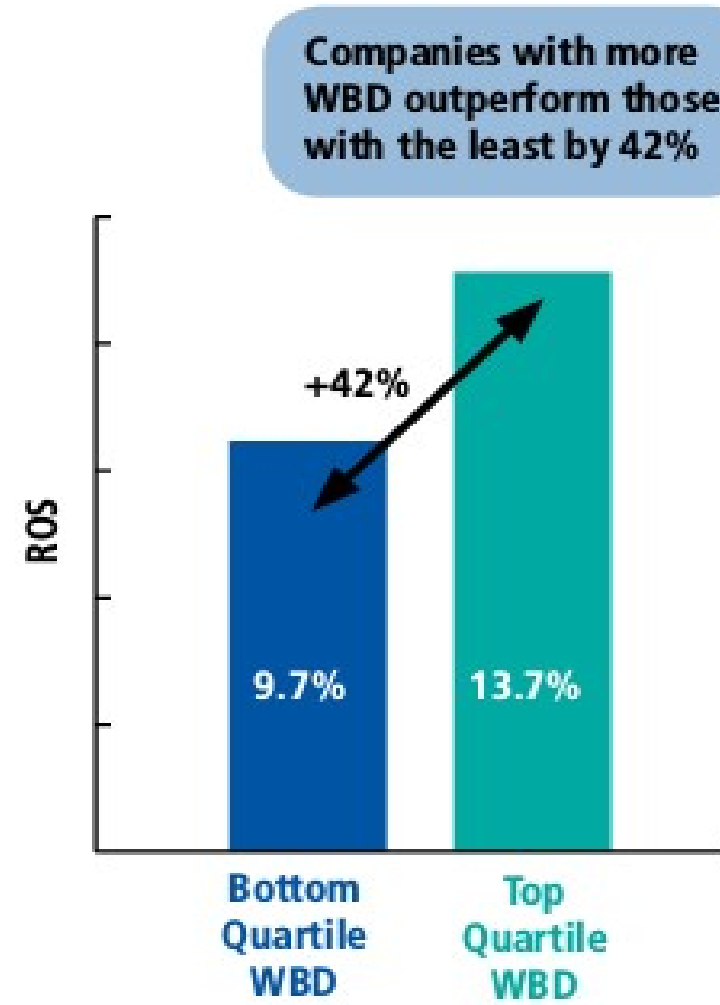


Advantages on Gender Balance

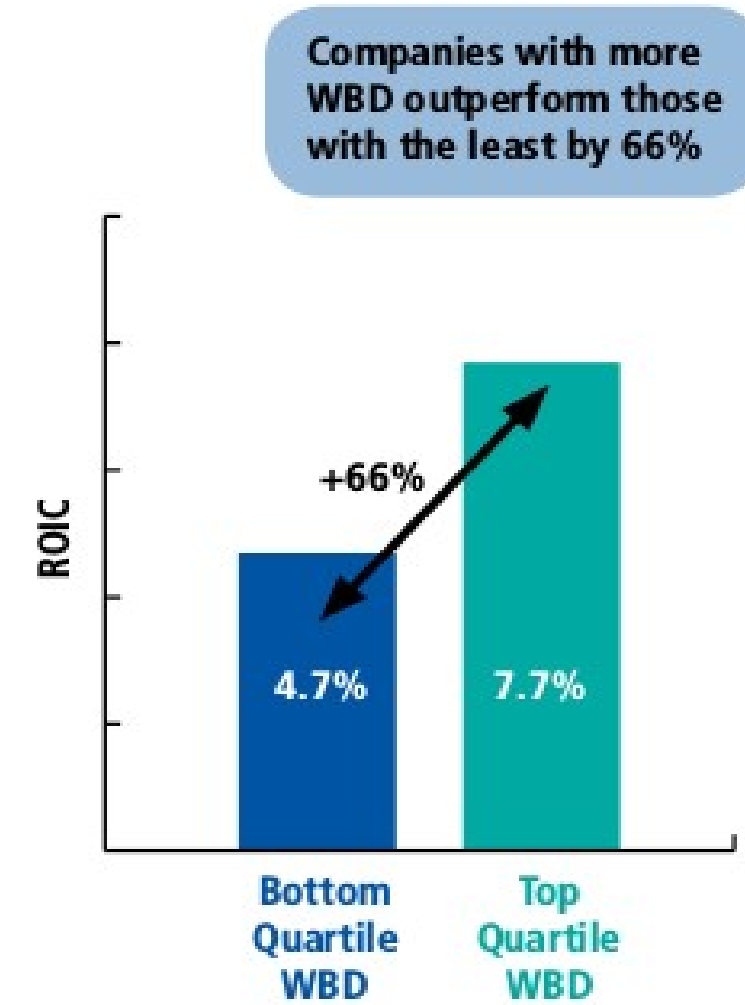
Return on Equity³ by Women's Representation on the Board



Return on Sales⁴ by Women's Representation on the Board



Return on Invested Capital⁵ by Women's Representation on the Board



What are the clues?

Complexity

How can women contribute?

Management

Science

What are the solutions?

In Tanzania, a new water well failed due to the failure of the development workers to include women on the local planning committee. Local soil conditions, of which women alone had knowledge, were not considered and therefore the new well ran dry.



What are the solutions?

The Gramalaya NGO worked with many women's groups when creating India's first sanitized slum in Tiruchirappalli, providing communities with safe drinking water and household and child-friendly toilets. Women in the Sanitation and Hygiene Education group have been responsible for maintenance and repairs and have eradicated open defecation in the area. The program has since been extended to seven other communities.



What are the solutions?



**GenderInSITE Parallel Workshop on Applying a Gender and Science Lens
to Water Issues**

TWAS Science Diplomacy Workshop 30 Nov - 4 Dec 2015

What is the solution?

WHAT	WHY	TO WHOM
Problem definition and Question Formation should involve women,	Women are socialized to appreciate complexity and networks, and to conceptualize ideas differently	Research Leads
Researchers and Funders need training on integrating gender in design and evaluation of research	Gendered aspects of research are not always obvious or considered important	Donors/ Funders
Women should be involved at the highest level of priority setting and funding decisions	Women rank/ prioritize topics differently, and ask different questions	National Science agencies, Science funders

What is the solution?

WHAT	WHY	TO WHOM
Need to consider women's perspective as users of technologies	Women are 50% of users (more in some regions/types of use)	Program and project designers and executors
Need to find appropriate ways to engage women	Women may not feel comfortable speaking up under the same circumstances as men (i.e. large community meetings)	Program and project designers and executors

What is the solution?

WHAT	WHY	TO WHOM
Financial tools should be equally accessible to men and women	Financial tools are the key to action, women need to be engaged	Banks, Funders/ Aid agencies
Women and men are equally well suited to natural and social sciences	All societies still have deeply instilled ideas about appropriate interests & careers for men and women	Educators, Parents
In many regions, women are disenfranchised and discriminated against	Tendency for progress & equality in some areas (i.e. basic education) to mask still-existing inequalities	Educators, Communities

What is the solution?

