SCIENCE DIPLOMACY

A Special Case: the Israeli Palestinian Middle East Conflict Hasan Dweik **Prof.** Polymer and Industrial Chemistry **AL-Quds University / Palestine Co-director Israeli-** Palestinian Science Organization (IPSO) Presented to World Science Forum Rio de Janeiro ,24-27th Nov.2013 BRAZIL

INTRODUCTION

i- Science is a common language and build bridges among diverse cultures .

ii-The use of science and science cooperation in promoting regional and international peace, it's an approach for helping to achieve peace

Iii-Science has a stabilizing influence on nations of different Ideologies and political Systems .

iv-It's the challenge of connecting people and resources

v-A catalyst between scientists and researchers in countries with limited official relations particularly in facing common scientific problems

- Climate Change and Environment,
- Water

- Agriculture and the Combat of Desertification

-Combat diseases and improve health

Why should nations Look into science as a vehicle for peace a-Its all about making better living to people b-Promote economic and social development c-Reduce tension among people,

We need better science to make us deal better with the future challenges of our planet

i- Solve food crises and look into future food production

ii-Solve water problems ,Water deficiency , Water pollution and to better manage our water resources

- iii-Deal with clean energy and power generation
- iv- join efforts in controlling Global warming and climate change
- vi-Combat diseases and poverty

The positives

Since 2004

- This organization managed to bring Palestinian and Israeli scholars from various Israeli and Palestinian universities to carry out high level research In :
 - * Environment ,Water ,Agricultural , Waste Management
 - *Public Health ,and Medicine (Trauma and Cancer research)
 - * Nanotechnology,
 - * Agriculture & Food Production (Chickpeas)

 Was the contribution of the Israeli-Palestinian Science Organization (IPSO) of any value in bringing peace closer in the Middle East

The answer is YES and NO

Successful Joint Research Projects

- 1- Environment and water Research a-Disposal and management of waste sites for obsolete pesticides in Palestine b-Water history in the middle east region (UNESCO)
 - c-Climate change ,hydro conflict and human security (a PF7 project with 13 European partners)
- 2- Medical Research
 - a-Consanguinity and congenital heart disease in Palestinian children

leukemia

b-Targeting Myristol Binding Pockets (MBP)in BCR –AB1 : A rational approach for the design of therapeutics against Philadelphia chromosome

c-Polymorphism and outcome after coronary Angioplasty .

3-Nanotechnology and Nano science a-*Electrical transport in single molecules upon stretching*

4-Agricultural Research and Food Production

a--Genetic and agronomics analysis of high and low temperature stress in chickpea

5- Science Education *Funded by European Commission ,ACBP, and Goldsmith Foundation (USA)

- A comprehensive Israeli- Palestinian cooperation in science education on various domains
- 1- Establish science laboratories for youth (age 9-15)
- 2- Create a science museum and a mathematics museum (promote informal education)
- 3- Establish a web site for science education particularly to improve science laboratories education at the high school level, and materials for teacher education.

- 4- Training of faculty members in curriculum development and text book writing
- 5- Human resource capacity building ,MSc, and PhD
 - Scholarships in local Israeli universities .

In all of these research areas

Relevance is the key what is the impact and the out put of scientific research and findings on the people of the region (Evaluation) whether it is in water(Management or quality) and environment (Transboundary) , health and medicine , agriculture and food,.....

What was achieved from these joint cooperation Projects

- 1- Human resources capacity building ,Training in specific fields ,MSc , PhD .
- 2-Infrastructure development, equipment,.....
- 3-Scientific Publications , Conferences , Workshops ,Discussion groups , Seminars, Exchange of knowledge and experiences
- 4-Networking with international academic institutions, research centers ,and universities5-Mobility of People ,knowledge ,& skills .

Other Relevant Benefits i-Certainly the human interaction was significant among scientists and researchers, ii-Social interactions helped in better understanding the two conflicting narratives, iii-Trust building iv-Discussions on prospects of peace among the two peoples

What makes Israeli and Palestinian researchers join hand in hand in tackling existing problems facing the two peoples,

The need to address local problems in various domains in our region for example

i- Water problems joint committeeii-Health problems Swan flew ,and othersiii- Agricultural and food production Problemsiv- Environmental problems and Pollution

The Crucial Question : Were these scientific activities enough in bringing peace closer

It seems that political actions by leaders may destroy what was built among scientists in many years ,

i-Confidence building measures and Trust

- ii-Friendship
- iii-Social interaction

iv-Networking among scientists locally and internationally