# Sub-Global Assessment Network



# A report on Ecosystem Assessment Mentoring Scheme:

By Ardavan Zarandian



5<sup>th</sup> Sub global Assessment meeting 27 October 2014





#### Mentee



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#### Mentor



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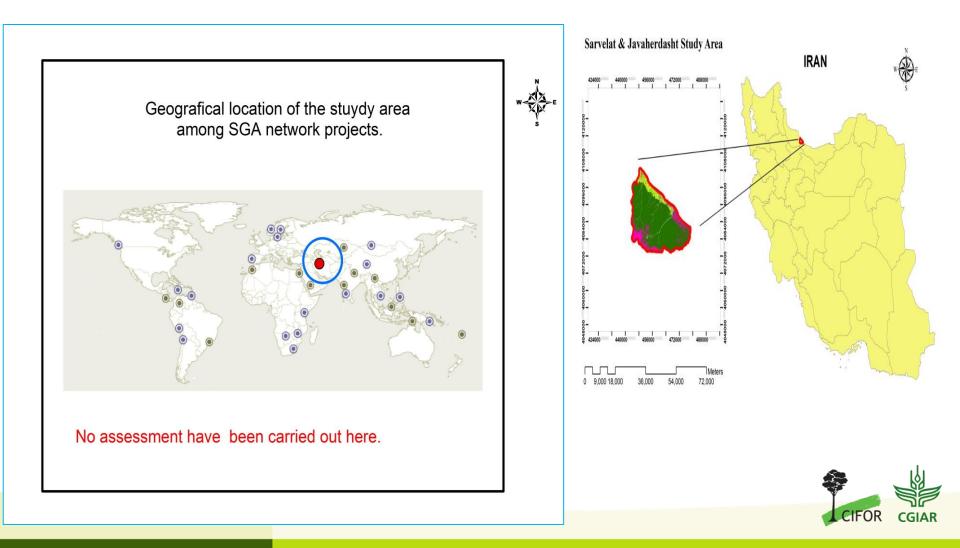
#### Mentoring Scheme has benefited my research through:

- Providing an opportunity to work closely with an experienced guide. I was keen to work on ES assessment but, I couldn't find a qualified mentor in my country, as ES is a rather new branch of science in Iran. Now, I am constantly in touch with my mentor with common interests.
- Financial facilitating for a research traveling. In recent years due to unfavorable economic conditions, research travels has been limited in my country. Mentoring scheme solved the problem.
- Increasing motivation to continue ES research. Although ES assessment has already been my favorite, but I was working in a non-continues way before the mentoring scheme. I motivated to work continuously, with more concentration and seriousness, since I developed more communication through SGA network.



#### My research :

#### Assessing ecosystem services for informed spatial planning in forested landscapes in Sarvelat & Javaherdasht in Northern Iran



#### Why the pilot area is important?



#### Globally & Regionally:

- contains remnants (refugia) of the broad leaf forests that once covered most of the North Temperate Zone, 25 - 50 million years ago, in the early Cenozoic Era.
- These forest disappeared during the Pleistocene ("Ice Ages") When the Europe covered by ice but were alive only here because of the proximity to the Caspian sea.
- at the end of frozen, plant species of Hyrcanian forests immigrated to Europe and these forests is mother of European forests.
- Nationally:
- Iran is a wide arid and semi arid country with so limited forest covers.



#### Iran: Forest Cover

- Total Land Area: 1.648.000 (Km<sup>2</sup>)
- Total Forest Area 110.750 (Km<sup>2</sup>)
- Percent Forest Cover: 6.77%

#### **Deforestation Rate**

- the area of forested lands, has been decreased from 4.3 to 1.9 million hectares during three recent decades.
- it indicates an average annual degradation equal with 80,000 Ha(800 km<sup>2</sup>), so the average annual rate of deforestation is calculated as 1.86% for a thirty year time period.

#### Iran: Forest types

- •Tropical (% forest area)0%
- •Subtropical (% forest area)98%
- •Temperate (% forest area)2%
- •Boreal/polar (% forest area)0%

More than 40% of the Ice Age survivor, has been lost only in 30 years.!!!!!!!

Due to:

- Land use/cover changes
- Wood smuggling
- Forest inappropriate management

#### Main lessons I learned

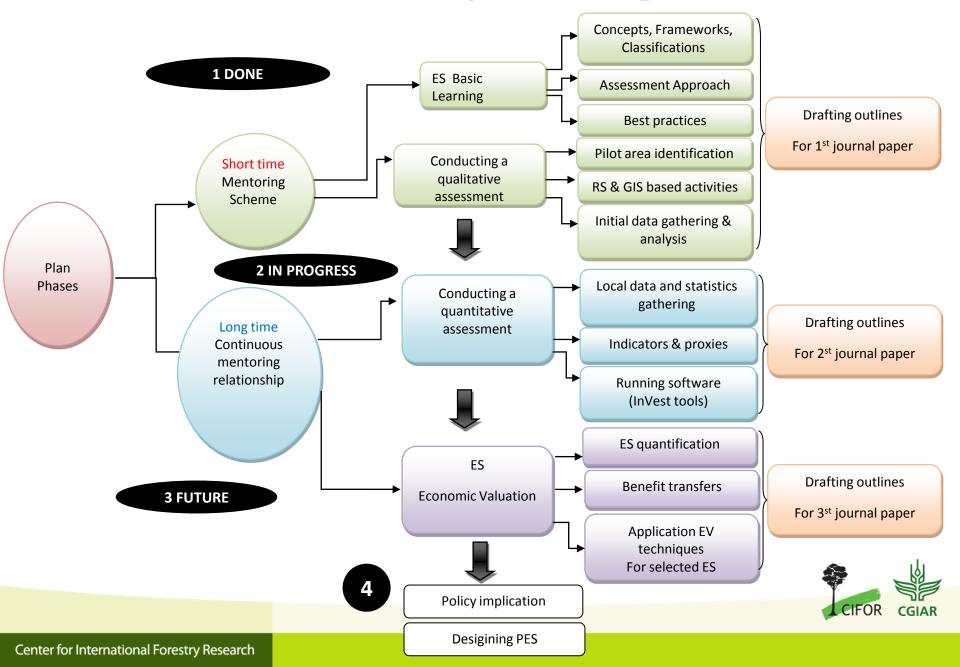
During working time with my mentor I learned:

- For a robust ES assessment, where should I start? How to go on and where to end? (An step by step ES assessment process).
- Which ES approach is appropriate for which conditions? (data availability, costs, time, ...)
- How can I define different scenarios to compare current situation with plausible future?
- How can I start with a qualitative assessment and move forward towards ES quantification and economic valuation?

Based on the lessons learned I designed a multi-stage plan for ES assessment in my study area.



#### Our multi-stages common plan



#### Activities taken until now

During June & August: (In Iran)

- Initial discussion to mentor on general issues (study area, data availability ....) through emails and Skype.
- Receiving and studying published papers of the mentor and others for literature review.
- Production of land cover/ land use map by mentee using satellite imagery and Arc GIS software.
- Designing expert judgment questionnaires with mentor's guidance.
- Getting opinions of more than 30 specialists about ES interconnections with land cover/uses in pilot area
- Sorting, editing of the gathered initial data .



#### Activities taken until now

- During learning travel: (22 Sep- 7 Oct) (In Bogor, Indonesia)
- First week
- Exchange initial data.
- Analysis of completed questionnaires.
- Defining a procedure to conducting a ES qualitative assessment using initial gathered data.
- Second week
- Production ES spatial distribution maps based on experts opinions
- Drafting outlines for 1<sup>st</sup> journal paper



#### Activities taken until now

- Oct after return to Iran:
- Writing the common paper:

Title:

### Ecosystem goods and services in Sarvelat and Javaherdasht forests in Northern Iran – status and trend

## So far so good The paper is ready to be submitted.



#### Acknowledgement

- As this mentoring scheme was funded by <u>UNEP/WCMC</u> and was coordinated by <u>CIFOR</u> I wish to greatly appreciate these aids.
- I also thank members of Iranian association for environmental assessment who were contributed in the process of ES qualitative assessment based on expert judgment.
- Finally I want to specially thank Dr. H. Baral (mentor) and Dr. M. Ling who helped me and facilitated my mentoring scheme in all its stages .

