

Ters Lale

*Fritillasio imperialis*

# NBSAP - TURKEY

## 2008-2018

Last Anatolian Panther  
(that gladiators used to kill)



Diverse phytogeography → Continental Property → High Endemism Ratio:  
4000 plants; 37 mammals; 70 fish ; 4000 invertebrates

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Section of Biodiversity and Genetic Resources

General Directory of Nature Conservation and National Parks

Ministry of Environment and Forestry

# INDEX

## MAIN FEATURES

- GOALS
- OBJECTIVES

## WHAT CHANGED IN THIS REVISED VERSION

## STATUS OF IMPLEMENTATION, INTEGRATION TO OTHER POLICIES, EDUCATION AND CHM



We have 500 wetlands which bird love very much



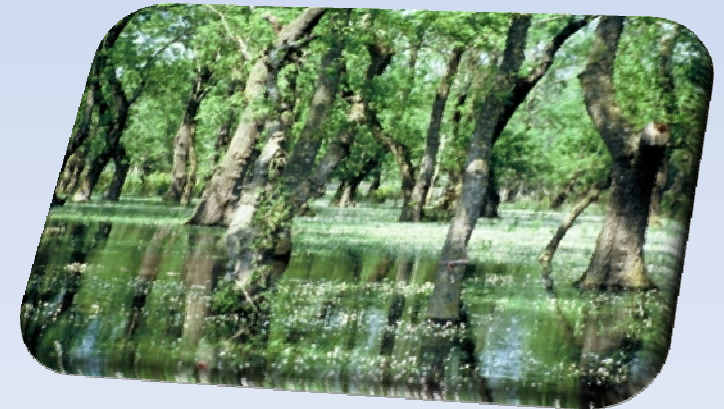
# Goals of our NBSAP

We have 10 goals

Goals

Objectives

Actions







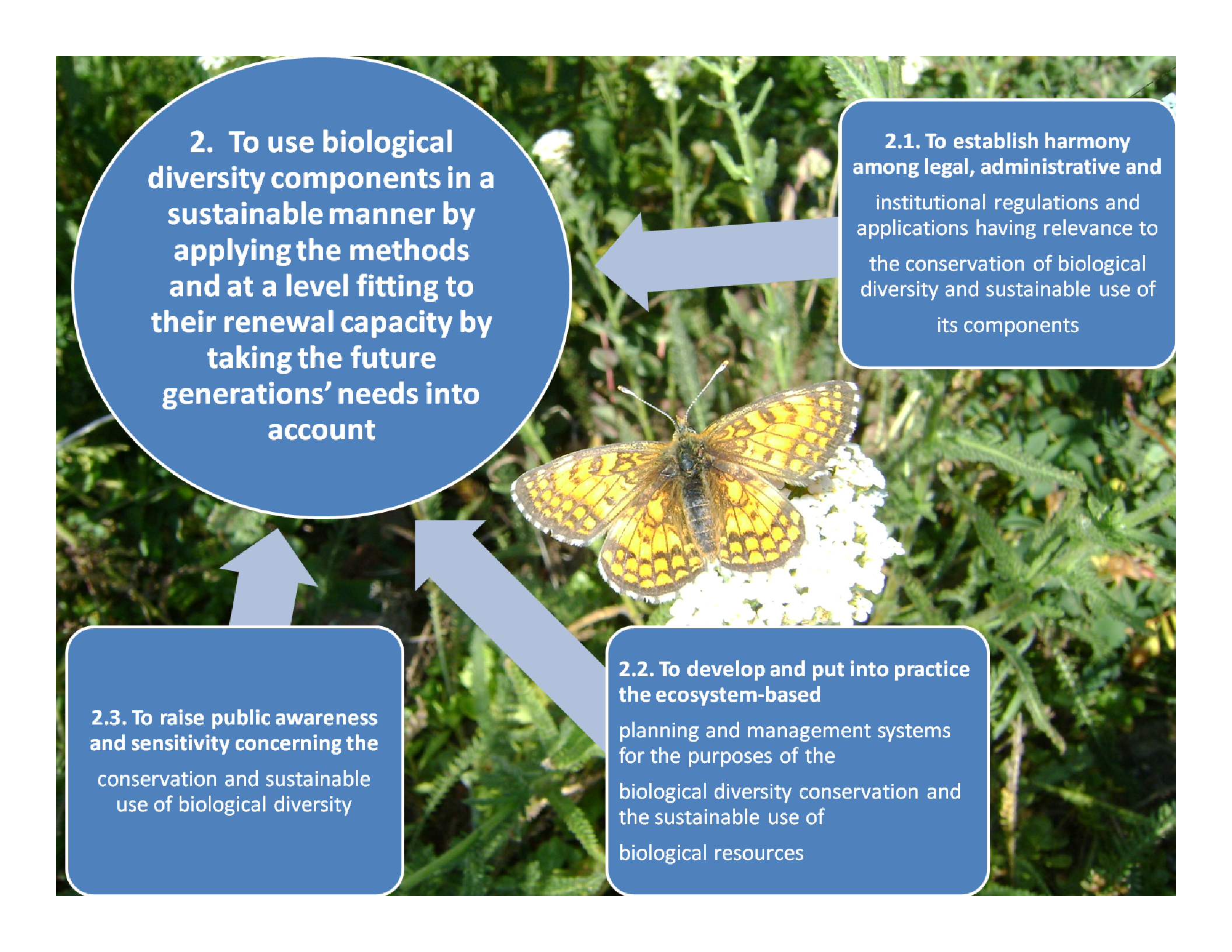
**1. To identify, protect and monitor biological diversity components which have importance for Turkey**

**1.1. In order to determine and monitor any changes in ecosystems, species and genetic diversity, to develop and implement biological diversity inventory and monitoring methods and programmes, by considering rapid assessment methods and biological diversity indicators, as well**

**1.2. To include the less-represented ecosystems, species and genetic diversity centres into protected areas of both terrestrial and aquatic ecosystems, and to achieve an effective protected area management**

**1.3. To prevent or minimize as far as possible any pressures on and threats to biological diversity**



A photograph of a butterfly with orange and black patterned wings perched on a white flower. The background is a lush green field. Overlaid on the image is a diagram with a central blue circle and three surrounding blue boxes, all connected by grey arrows pointing towards the central circle.


**2. To use biological diversity components in a sustainable manner by applying the methods and at a level fitting to their renewal capacity by taking the future generations' needs into account**

**2.1. To establish harmony among legal, administrative and institutional regulations and applications having relevance to the conservation of biological diversity and sustainable use of its components**

**2.3. To raise public awareness and sensitivity concerning the conservation and sustainable use of biological diversity**

**2.2. To develop and put into practice the ecosystem-based planning and management systems for the purposes of the biological diversity conservation and the sustainable use of biological resources**






**3. To identify, protect and benefit the components of genetic diversity, including the traditional knowledge, which have importance for Turkey**

3.1 To identify, record, protect and manage the components of genetic diversity which have importance in terms of biological diversity, agriculture, food and economic value

3.2 To control access to genetic resources and guarantee the sharing of the benefits arising out of the utilization of these resources with Turkey





**4. To identify, protect and monitor the components of biological diversity which have importance for agricultural biological diversity; to protect genetic resources which have actual and potential values for food and agriculture, and to ensure the sustainable use of such resources; and to ensure the fair and equitable sharing of the benefits arising out of the utilization of genetic resources**

**4.1 To identify, protect and monitor the biological diversity elements which have importance for agricultural biological Diversity**

**4.2 To develop management applications and technologies**  
as well as policies which support the positive impacts of agriculture on biological diversity, on one hand, and minimize its adverse impacts, on the other hand, and to increase yield from agricultural ecosystems and its capability to sustain as a source of livelihood

**4.4. To ensure conservation and sustainable use of genetic resources which have actual and potential values for food and agriculture; and to ensure the fair and equitable sharing of the benefits from the utilization of genetic resources**

**4.3. To prevent or minimize as far as possible any pressures on and threats to agricultural biological diversity which come from the genetically modified organisms (GMO's) and the alien Species**



**5. To protect steppe biological diversity, to ensure the sustainable use of its components, as well as to ensure the fair and equitable sharing of the benefits from the utilization of genetic resources; and to combat against the loss of steppe biological diversity and the socioeconomic results of that**

5.1. To fill the information gaps concerning steppe biological diversity

5.2. To identify ecological, physical and social processes such as grazing, drought, desertification, aridity, salinity, flood, fires, tourism, agricultural transformation or abandonment which have adverse impacts on the biological diversity of steppe ecosystems and mainly on the ecosystem structure and function, and to take measures regarding the above

5.3. To establish mechanisms and frameworks in order to support the fair and equitable sharing of the benefits from the utilization of the genetic resources of steppe areas



**6. To establish an effective monitoring, management and coordination system for the conservation of forest biological diversity and the sustainable use of its Components**

6.1. To develop and put into practice the monitoring programmes for better evaluation of the status and tendency of forest biological diversity

6.2. To establish appropriate mechanisms for more effective conservation and sustainable use of forest biological diversity




**7. To establish an effective monitoring, management and coordination system for the conservation and sustainable use of mountain biological diversity, together with its different ecosystems, pursuing a holistic approach**

7.1. To effectively implement biological and ecological inventories, monitoring programmes and classification systems

7.2. To establish appropriate mechanisms for the conservation and sustainable use of sensitive mountain ecosystems





**8. To develop and implement effective methods for the conservation of inland waters biological diversity, the maintenance of ecological functions of inland waters ecosystems, and the sustainable use of these ecosystems**

**8.1. To strength technical and institutional capacity for the conservation and sustainable use of inland waters biological diversity**

**8.2. To take actions for the conservation and sustainability of inland waters biological diversity and reduce threats to it**

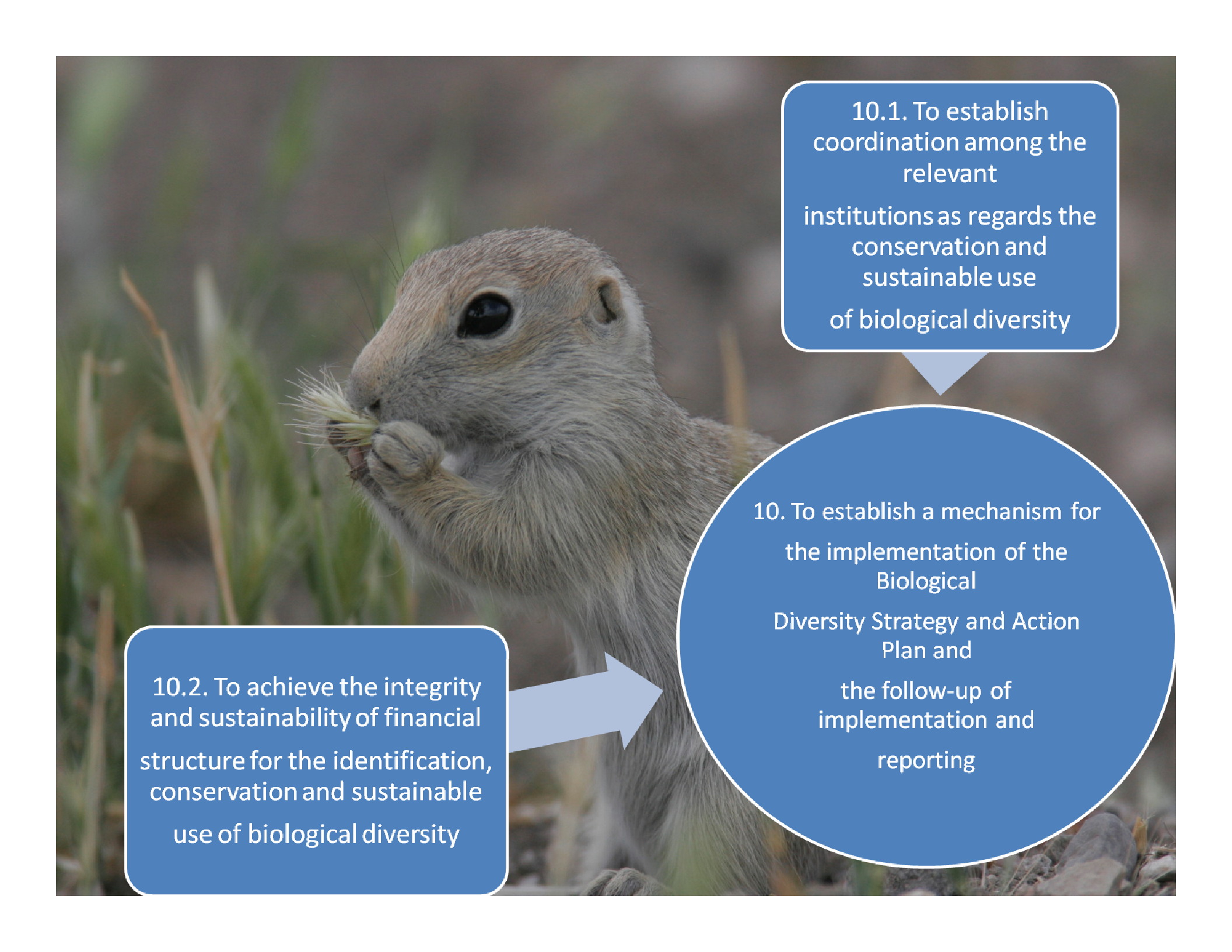
**9. To develop and implement effective methods for the conservation of coastal and marine biological diversity, the maintenance of ecological functions provided by coastal and marine ecosystems, and the sustainable use of these ecosystems**

**9.1. To strengthen necessary administrative, legal, institutional and technical capacity for the identification, monitoring, conservation and sustainable use of coastal and marine biological diversity**

**9.2. To fill the information gaps concerning coastal and marine biological diversity, to identify and put under conservation the areas and species which have importance for biological diversity and are under threat, and to develop and implement monitoring programmes**

**9.3. To combat against the threats to coastal and marine biological diversity**



A close-up photograph of a squirrel with grey and brown fur, sitting and eating a nut. The squirrel is holding the nut in its paws and has a piece of the shell in its mouth. The background is a blurred natural setting with green grass and brown twigs. Three blue text boxes are overlaid on the image. One is a rounded rectangle at the top right, one is a rounded rectangle at the bottom left, and one is a large circle on the right side. A white arrow points from the bottom-left box towards the circle, and a white arrow points from the top-right box towards the circle.

10.1. To establish coordination among the relevant institutions as regards the conservation and sustainable use of biological diversity

10.2. To achieve the integrity and sustainability of financial structure for the identification, conservation and sustainable use of biological diversity

10. To establish a mechanism for the implementation of the Biological Diversity Strategy and Action Plan and the follow-up of implementation and reporting



# What Changed In this Version?

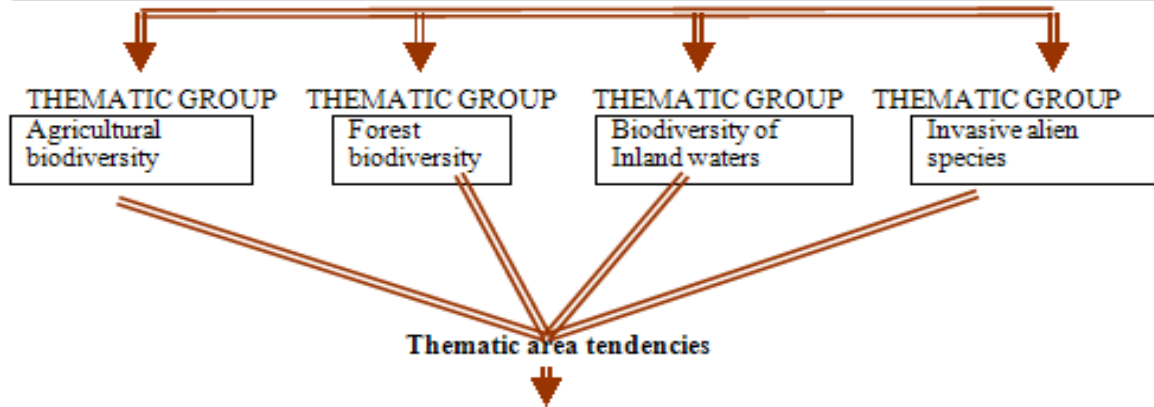
- Process of Revision
- Priorities
- Resulting Concrete Facts
- Gaps and Needs for Effective Information Sharing → What Action in new NBSAP used?
- Table of olds vs news
- List of Identified Biodiversity Conservation Projects for future implementation



## FLOW CHART OF THE PROCESS OF REVISION OF THE NBSAP

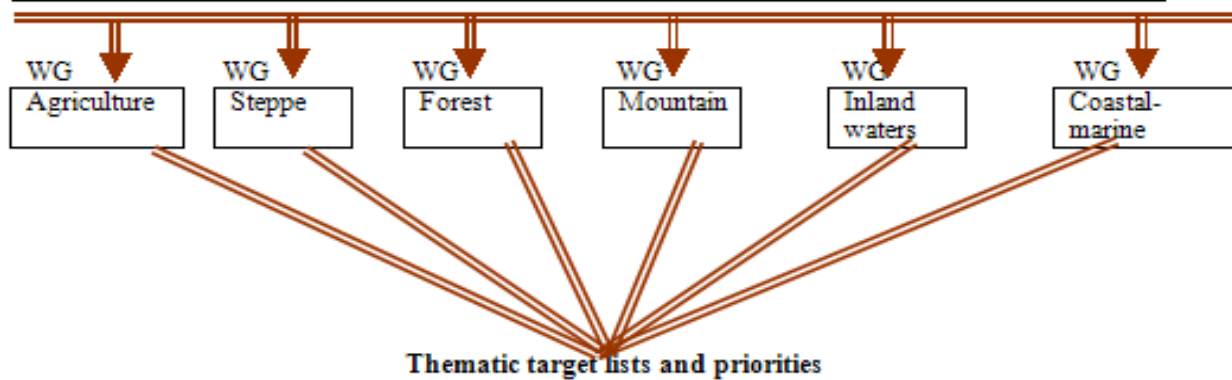
### 1<sup>ST</sup> WORKSHOP

AIM: Prioritization of thematic area tendencies in the scope of ecosystem sub-components and ecosystem management elements



### 2<sup>ND</sup> WORKSHOP

AIM: prioritization of targets, elaboration of actions, gap analysis, establishment of time frames



Instrument: software  
Outcome: common priorities, thematic priorities

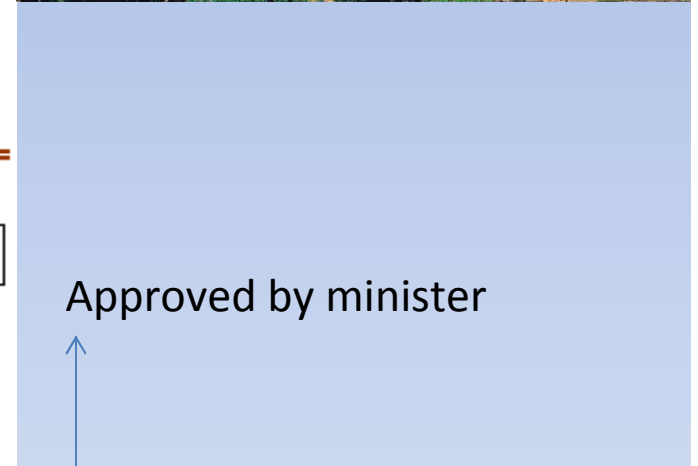
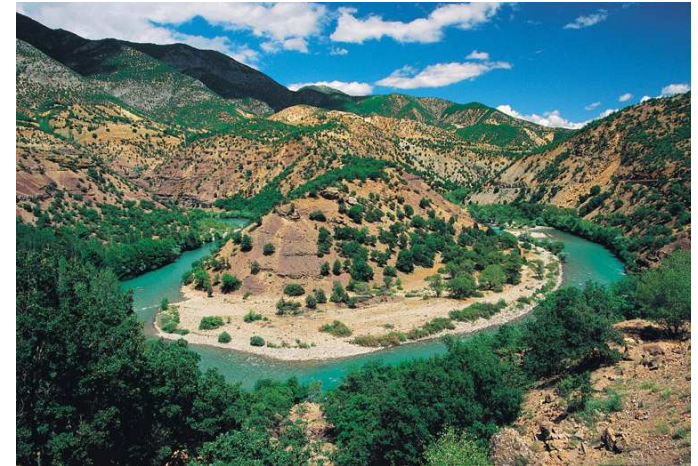
Determination and elaboration of actions by WGs

Gap analysis for actions

**Draft NBSAP**

Consultation with stakeholders

**FINAL NBSAP**



Approved by minister



# PRIORITIES

- Identification of indicator species and establishment and effective implementation of inventory, classification and monitoring systems,
- Identification, registration, conservation and management of genetic diversity important for biological diversity, agriculture, food security and economic value,
- Establishment of central information management mechanism in order to disseminate and share results of researches among decision-makers, technical staff and other stakeholders, in a manner to allow faster analysis and understanding of biological and biophysical data,
- Development of specific conservation measures for sensitive and threatened ecosystems and species, ecosystems having high biodiversity, critical habitats, classification groups which have economic value and ecosystems under severe pressure due to human induced activities,
- Determination and monitoring of effects of climate change on biodiversity, and implementation of measures to protect most affected ecosystems and species against climate change,
- Determination and conservation of biodiversity hotspots,
- Strengthening of relationship and coordination between implementation processes of biodiversity related national initiatives such as agricultural strategies, development plans, forestry programmes,
- Encouragement of sustainable use of biological resources and reduction/elimination of negative impacts of natural resource treatment patterns.



# RESULTING CONCRETE FACTS

- Proportion of protected areas to the country area has increased from 4% to 6% since 2001. However, loss of diversity in step ecosystems continued, since the existing legislation does not cover appropriate provisions on the protection of biodiversity of step ecosystems, (AGM vs DKMP – Forestration of Steppe Ecosystems)
- Capacity of *ex-situ* conservation and number of materials conserved in *ex-situ* conditions have raised, in particular materials of cultivated plants and their wild relatives,
- Positive developments toward conservation and sustainable use have been achieved by adoption of new regulations (pasture law, environment law etc.), but yet some of the new regulations such as mining law and law on tourism promotion have still negative effects on biodiversity,
- The proportion of forest covers to the total country surface area increased from 26.6 % to 27.2 %, but while half of the forests were degraded, the enhancement was made through reforestation. Additionally, there is an increase in number of annual forest fires,
- Interest of media about protection of environment and number of TV programs on this issue increased, understanding and awareness of public on conservation of natural environment improved, but yet loss of biodiversity caused by human effects still continues,
- Although, Turkey has necessary legislations, institutional infrastructure and human resources to protect biodiversity as a primary concern and in compliance with the provisions of CBD, desirable level of biodiversity conservation could not be achieved due to limited financial resources and insufficient coordination between the institutions.





# GAPS

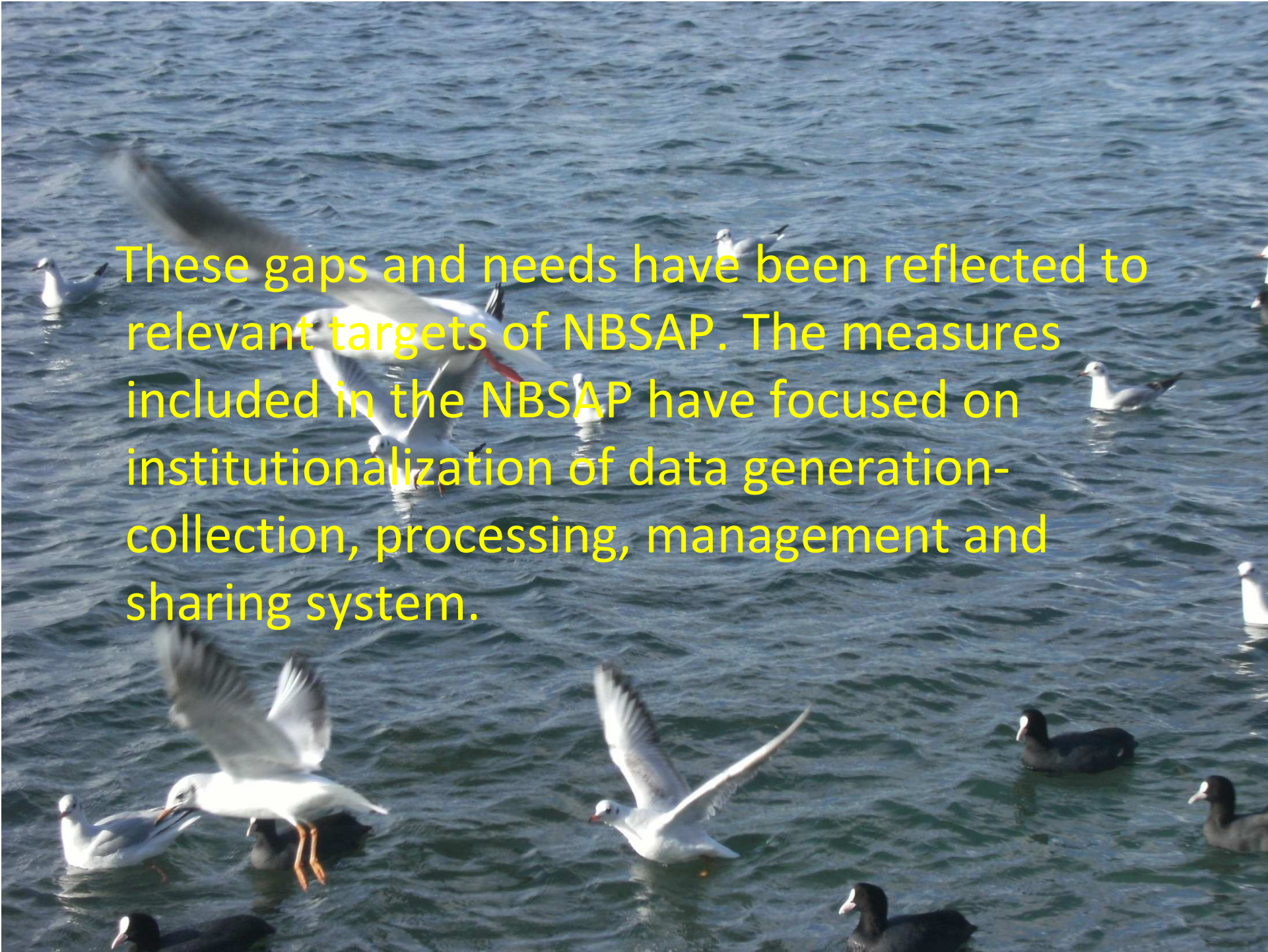
- Inventory of invertebrates (in particular insects), microorganisms, fungi, soil biota and pollinators
- Genetic diversity
- Biological indicators
- Risk categories of fauna and flora species
- Exact distribution of some of the threatened species
- Distribution of marine meadows
- Effects of climate change on biodiversity
- Interrelationships of biotic and abiotic factors within given ecosystems



# Requirements for Effective Information Sharing

- Human resources on information technologies (mapping, modelling, GIS, database management, etc.)
- Technical capacity for data collection (remote sensing, rapid assessment, etc.)
- Effective use of available financial resources and technical capacity
- Administrative arrangements to ensure information and data sharing





These gaps and needs have been reflected to relevant targets of NBSAP. The measures included in the NBSAP have focused on institutionalization of data generation-collection, processing, management and sharing system.



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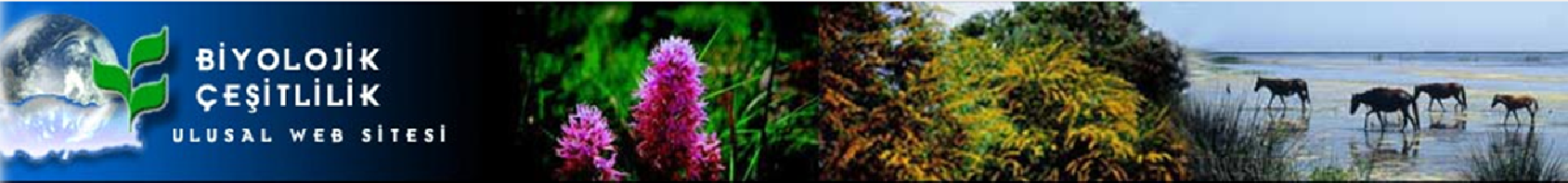
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# Old vs new goals

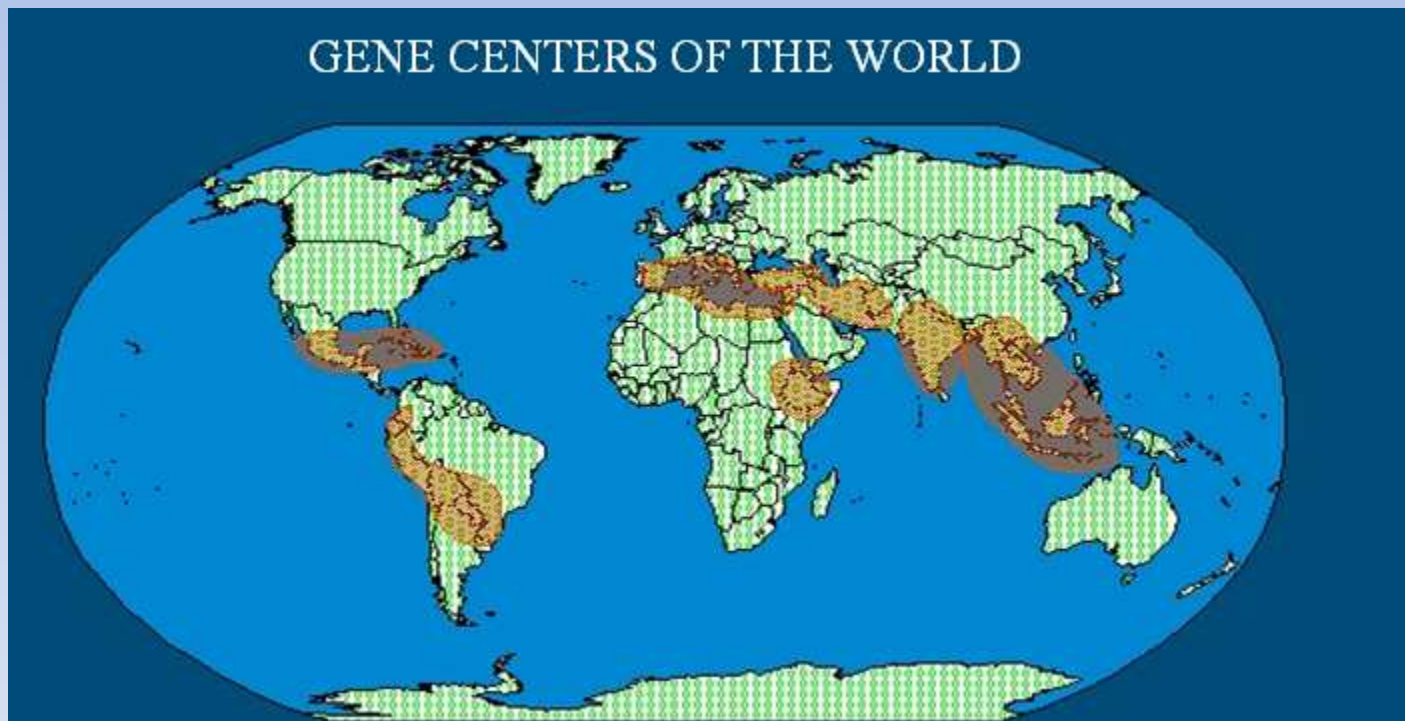
GOALS AND TARGETS OF OLD VERSION / NEW VERSION OF NBSAP	
Goals of old version of NBSAP	Goals of new version of NBSAP
<b>GOAL 1 Conservation and Sustainable Use:</b> <b>90 strategic actions on</b> - wild flora and fauna and other wild organisms - protected areas - restoration and rehabilitation - sustainable use of biological resources - biosafety-alien species and GMOs - population and settlements	<b>GOAL 1: Identification, conservation and monitoring of components of biological diversity:</b> <b>3 Targets and 23 strategic actions on general issues about</b> - identification and monitoring - protected areas - conservation
<b>GOAL 2 Ecological Management</b> <b>33 strategic actions on</b> - improving ecological management capability - increasing resource management capability - monitoring	<b>GOAL 2 Sustainable use</b> <b>3 Targets and 19 strategic actions on</b> - complementary and compatible legislative, administrative and institutional systems - ecosystem based planning and management - public awareness and participation
<b>GOAL 3 Education and Awareness</b> <b>4 strategic actions</b>	
<b>GOAL 4 Incentives and Legislation</b> <b>8 strategic actions</b>	
<b>GOAL 5 International Cooperation</b> <b>5 strategic actions</b>	<b>GOAL 10 Implementation</b> <b>2 Targets and 13 strategic actions on</b> - coordination and cooperation - financial mechanisms
<b>GOAL 6 Implementation</b> <b>8 strategic actions</b>	



# NEW GOALS INCLUDED IN THE REVISED VERSION OF NBSAP

<b>GOAL 3</b> Genetic diversity and traditional knowledge 2 Targets and 10 strategic actions
<b>GOAL 4</b> Agricultural biodiversity 4 Targets and 24 strategic actions
<b>GOAL 5</b> Steppe biodiversity 3 Targets and 14 strategic actions
<b>GOAL 6</b> Forest biodiversity 2 Targets and 9 strategic actions
<b>GOAL 7</b> Mountain biodiversity 2 Targets and 10 strategic actions
<b>GOAL 8</b> Biodiversity of inland waters 2 Targets and 10 strategic actions
<b>GOAL 9</b> Coastal and marine biodiversity 3 Targets and 18 strategic actions

# LIST OF IDENTIFIED BIODIVERSITY CONSERVATION PROJECTS FOR FUTURE IMPLEMENTATION



2 macro gene centers intersect in Turkey: Mediterranean and Close East.

Turkey has 5 micro gene centers



- **Identification of the distribution of medical plant species, development and dissemination of cultivation methods to diminish pressure on wild populations**
- **Identification and registration of plant and animal genetic resources for the purposes of *ex-situ* and *in-situ* conservation and sustainable use**
- **Identification of genetic diversity of species that have genetic centers in Turkey by molecular methods**
- **Identification of the impacts of climate changes on biodiversity, in particular on forests, inland and marine ecosystems**
- **Identification of microbial diversity in Turkey and establishment of national microbial collection center**
- **Cultivation of economically valuable, sensitive, threatened and endangered species in natural flora, development of controlled production and collection mechanisms**
- **Determination of ecological relations among species in nature protection areas**
- **Development of mechanisms to control invasive alien species**
- **Establishment of laboratory network for GMOs**
- **Classification of stressed forest ecosystems and their threat categories**
- **Identification and conservation of endangered species in sensitive mountain ecosystems**
- **Determination of bio-indicator species**
- **Establishment of gene bank for aquatic species**
- **Development and implementation of integrated coastal area management plans for the coastal ecosystems under human pressure**
- **Mapping of distribution of sea grasses by GIS and preparation of action plans for their conservation**
- **Establishment of marine and coastal protected areas**





*Thank you*