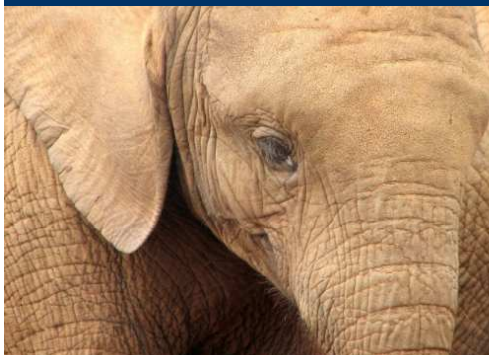
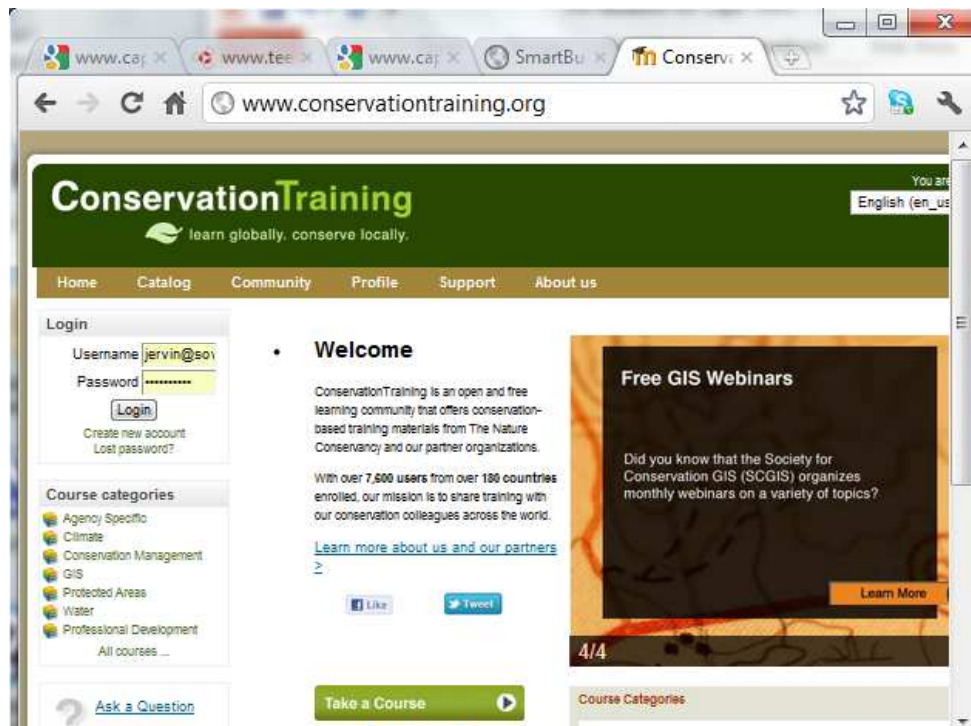


Assessing protected area values: Making the economic case for protected areas



Jamison Ervin, UNDP Senior Advisor

TWO WAYS TO ACCESS E-LEARNING MODULES



www.conservationtraining.org

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E-module on PA policy and valuation

The screenshot shows a web browser window with the following elements:

- Browser Tabs:** www.capetown, www.besbiweb, www.capetown, SmartQuill-F, ConservationT...
- Address Bar:** file:///C:/Users/Owner/Desktop/Policy%20Module%20Lesson%203/player.html
- Logos:** gef (Global Environment Facility), Convention on Biological Diversity (leaf logo), and UNDP (United Nations Development Programme).
- Section Header:** "Enabling Policy Environment" in white text on an orange background.
- Image:** A photograph of several smooth, light-colored river stones.
- Lesson Title:** "Lesson 1: Assessing Protected Area Benefits" in white text on a green background.
- Button:** A "Begin" button with a right-pointing arrow icon.
- Footer:** "Topics" with a book icon on the left, and "1 of 38" on the right.



35000 ha of forest store over 1.4 billion gallons of water per day, serving more than 8 million people daily

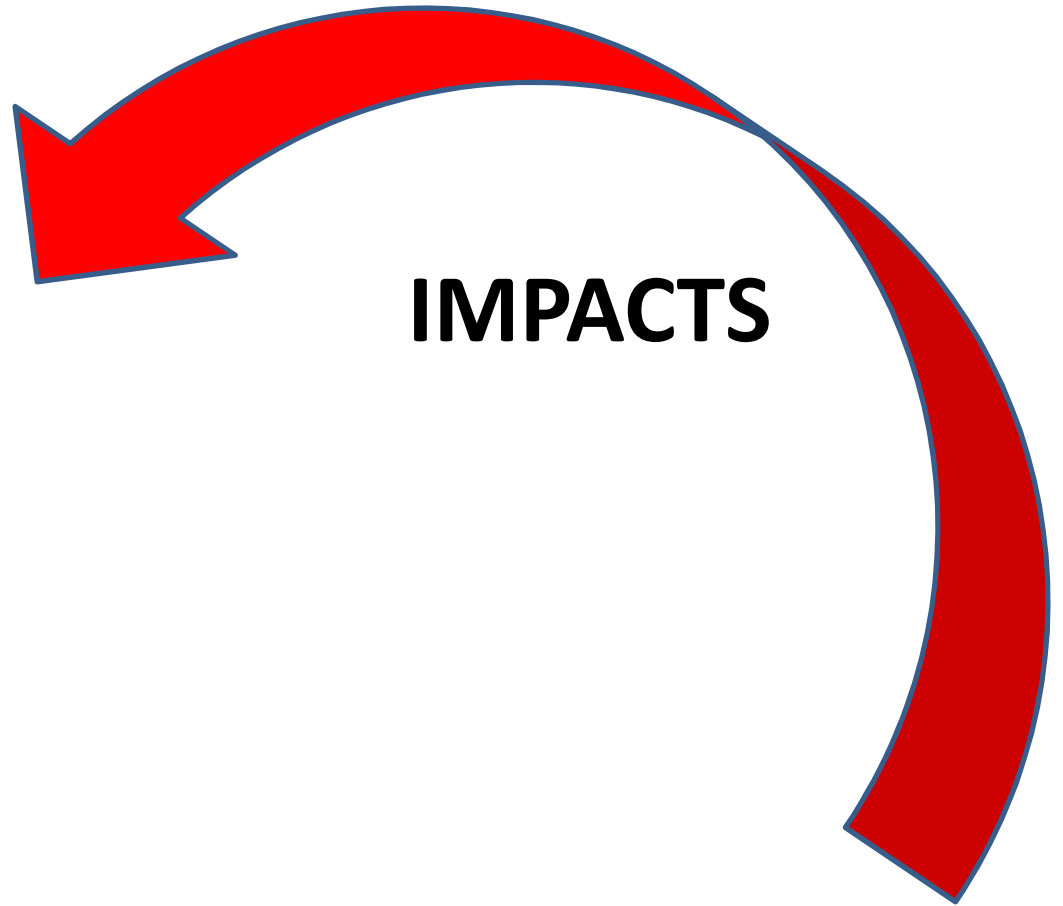
The cost is \$320 million, BUT this investment avoids \$6 billion in water treatment costs (plus \$300 million/year in operating costs)





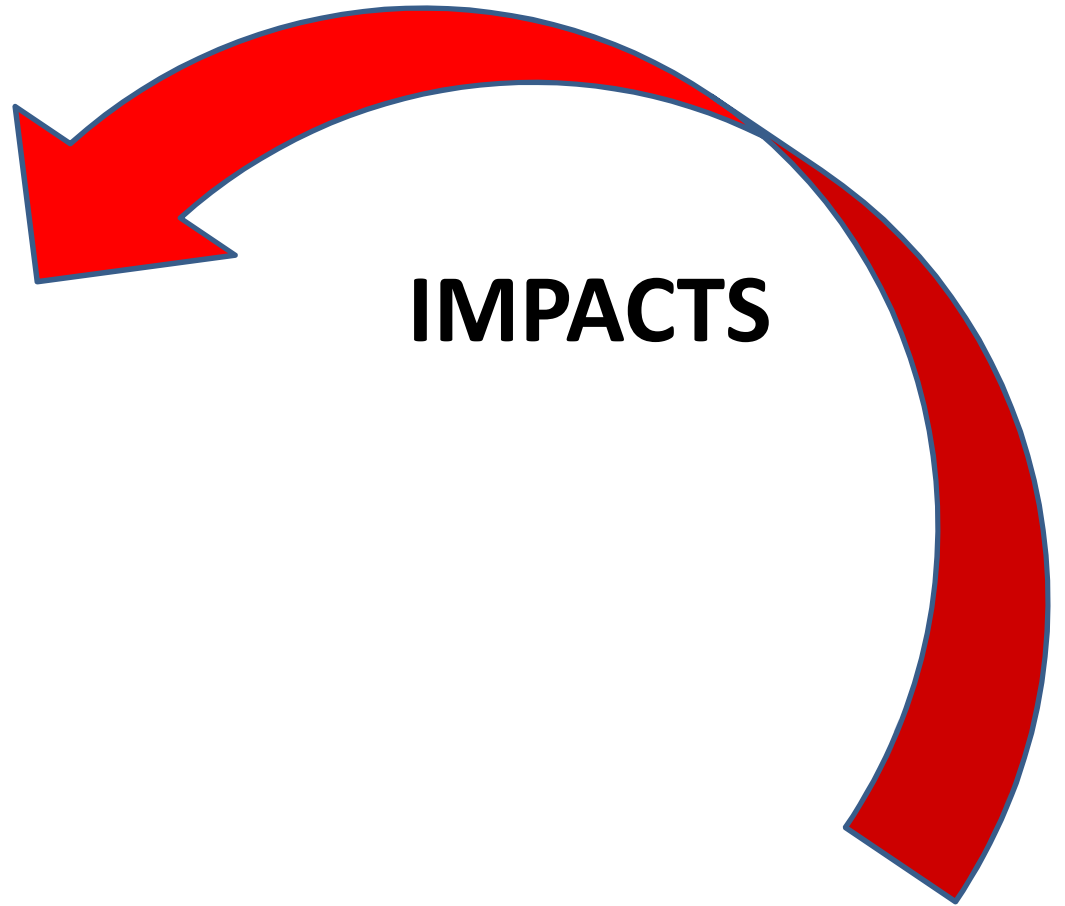
8 million residents of Bogota obtain water from Chingaza and Sumapaz national parks.



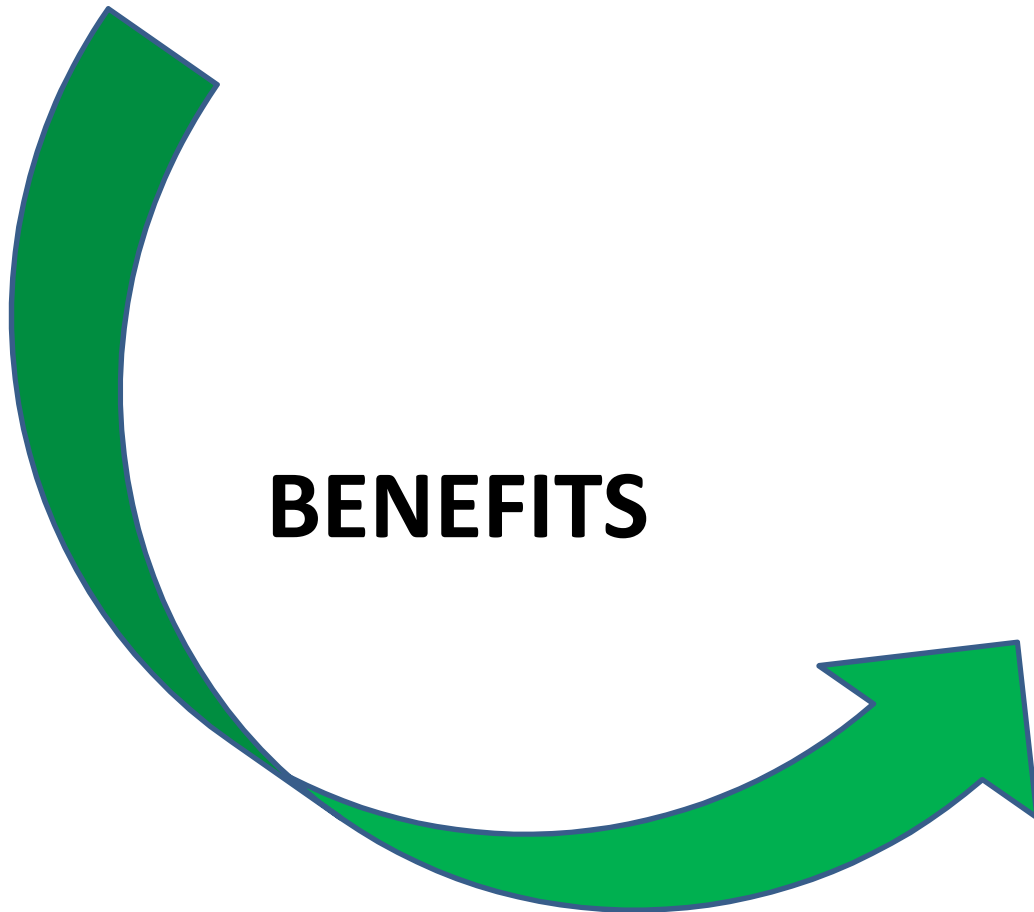


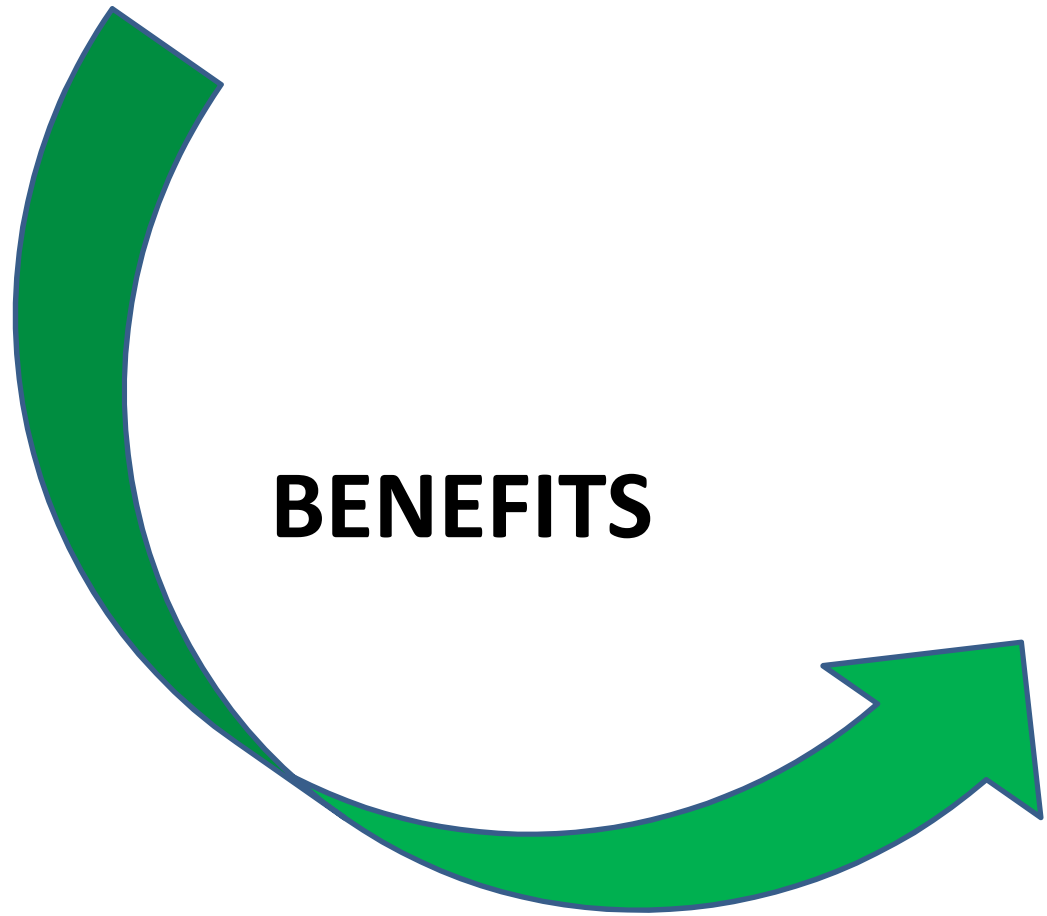
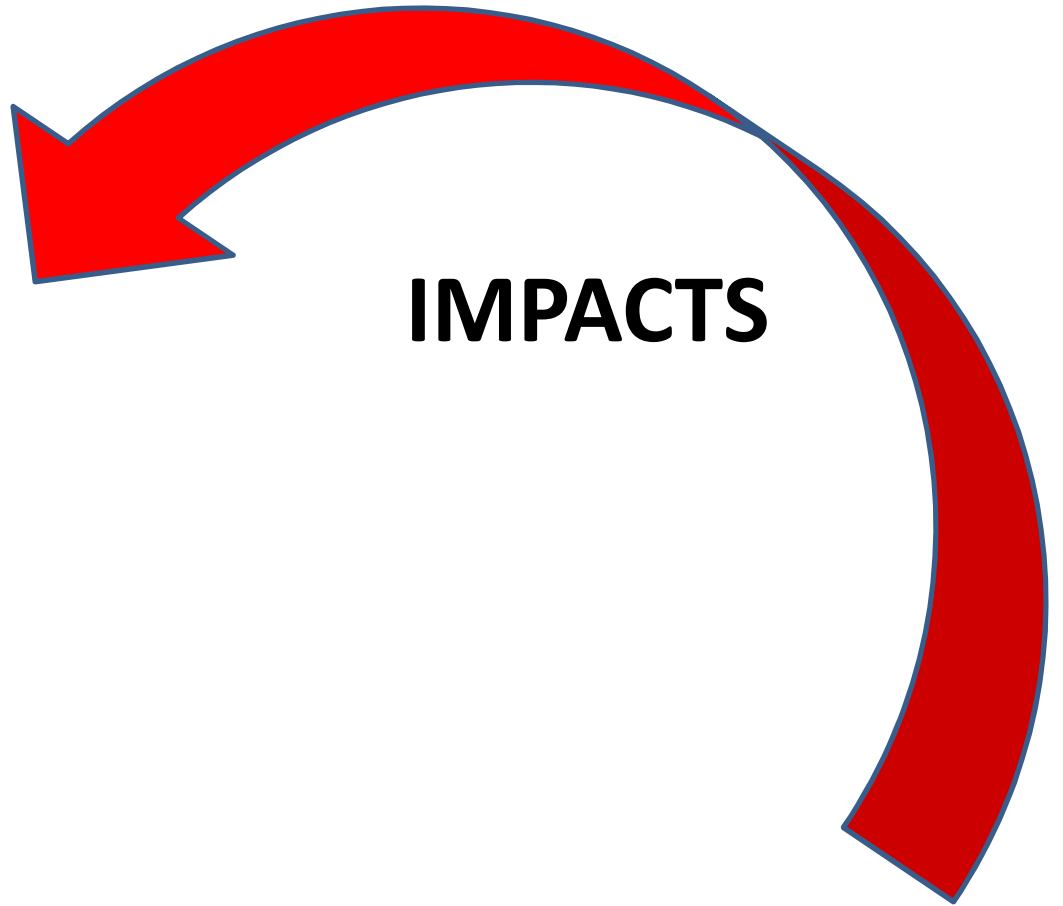
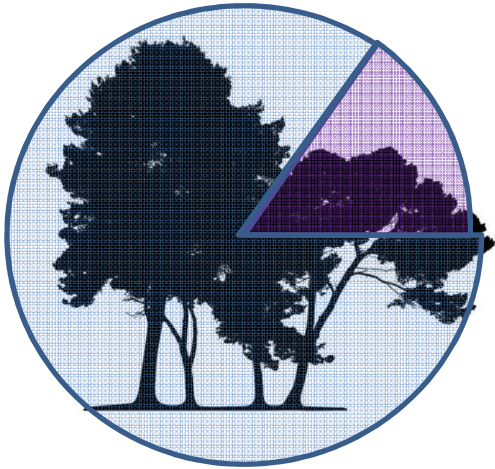


IMPACTS

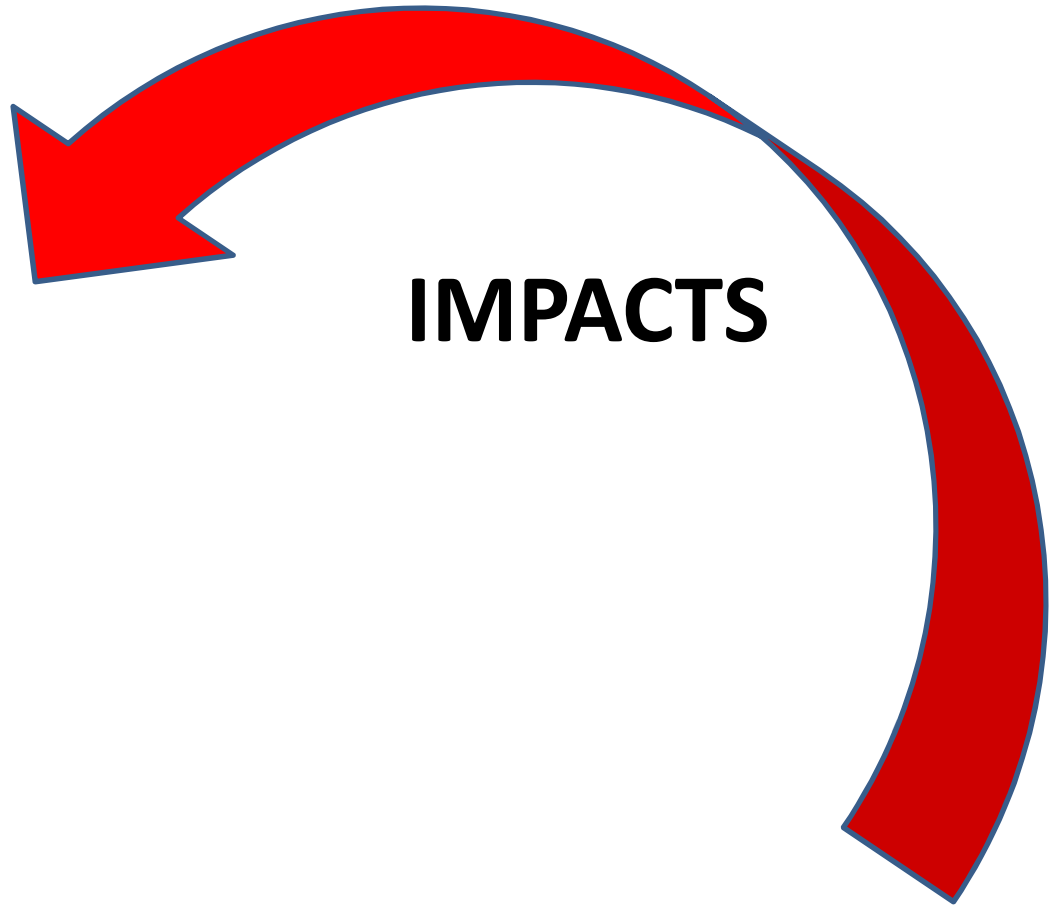
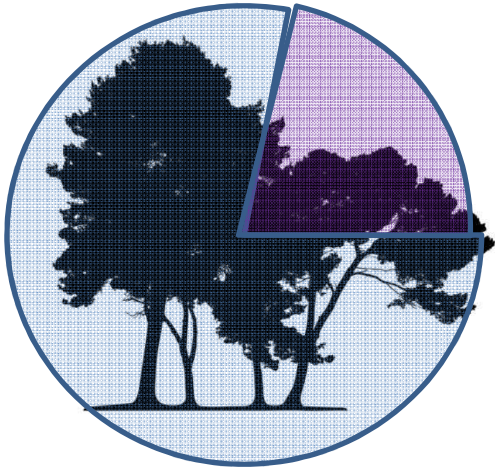


BENEFITS

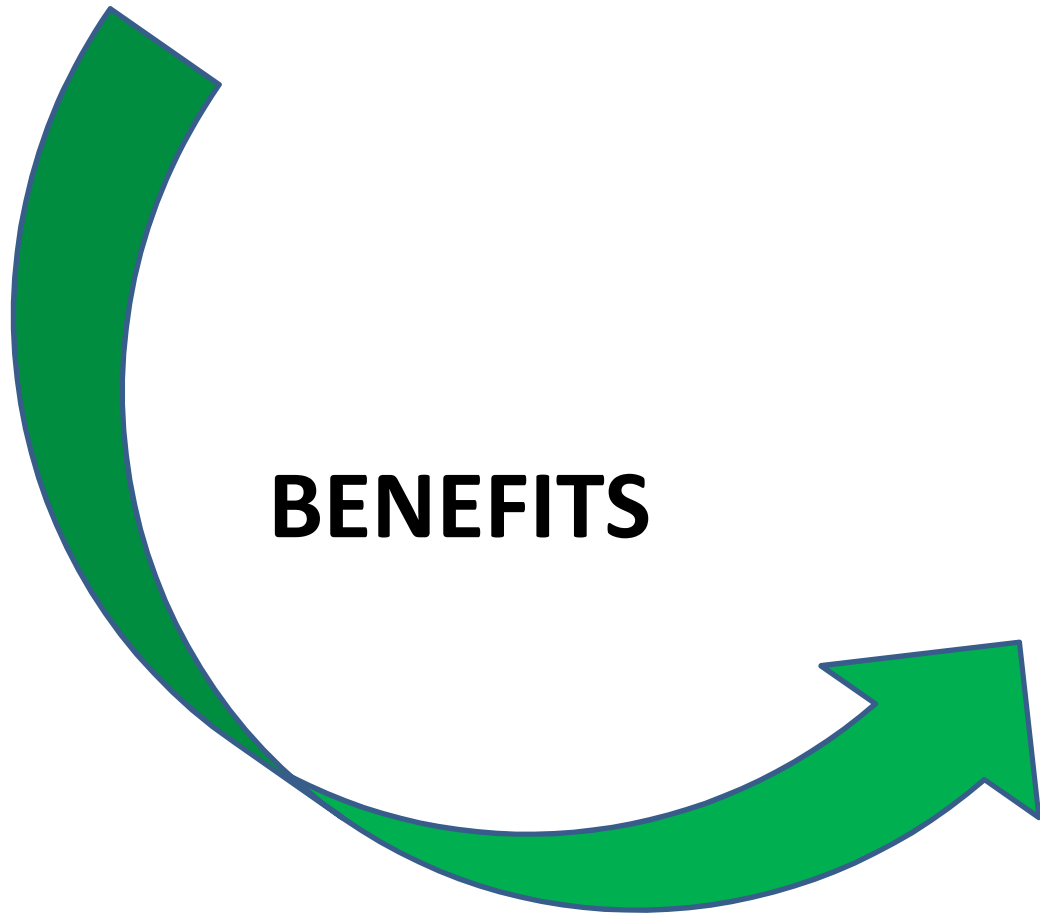




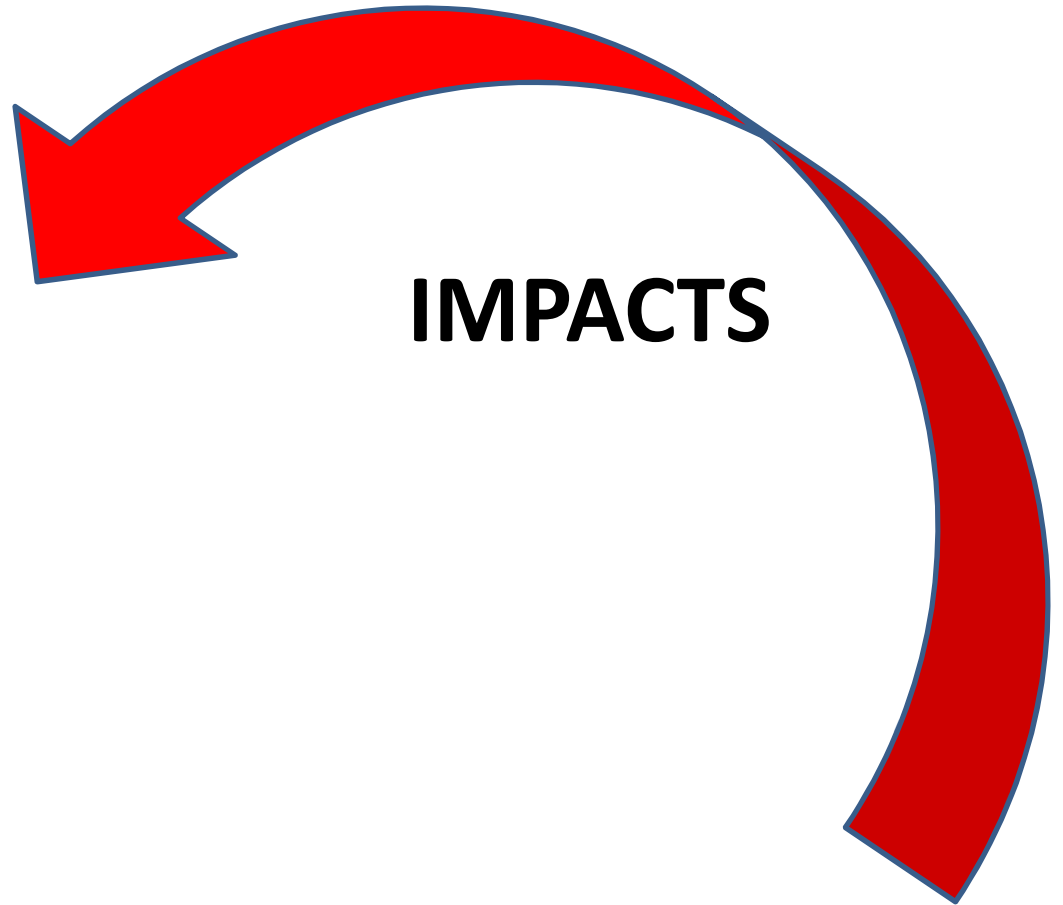
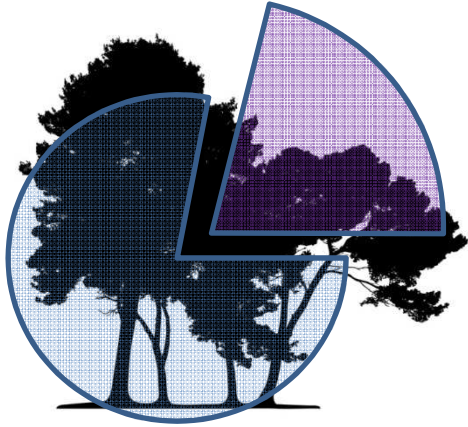
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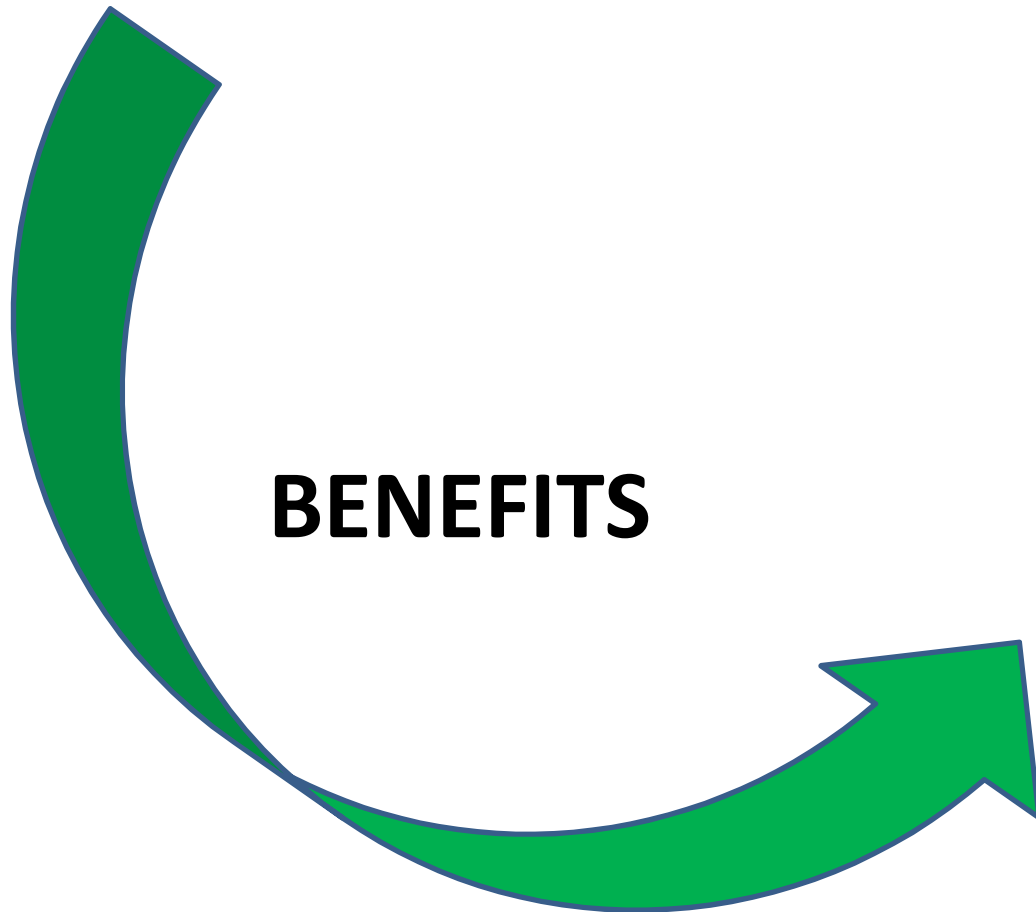
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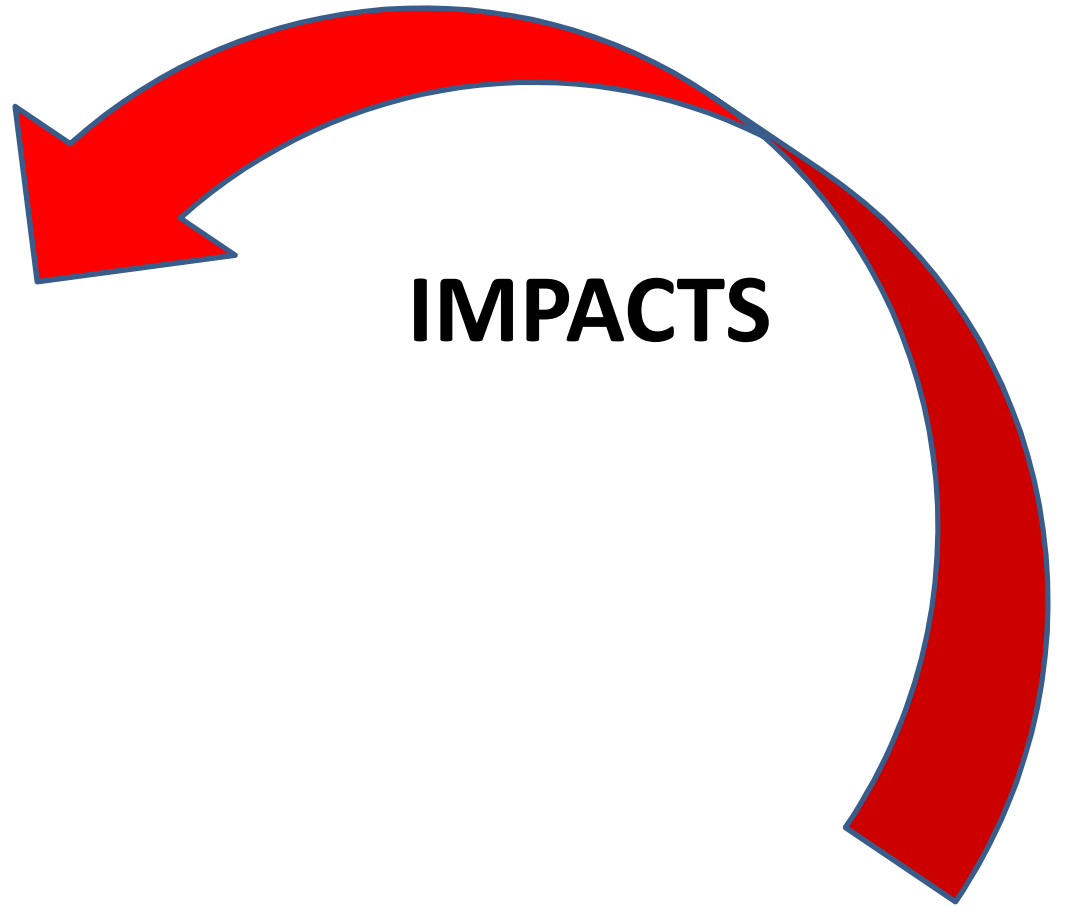
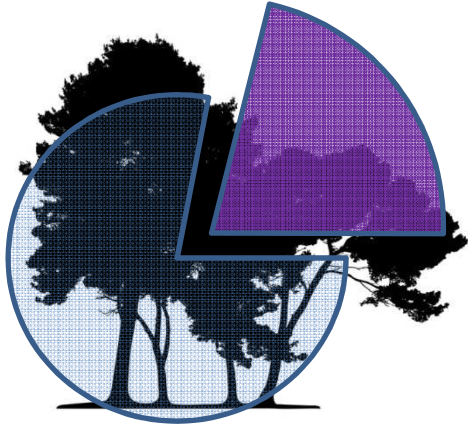
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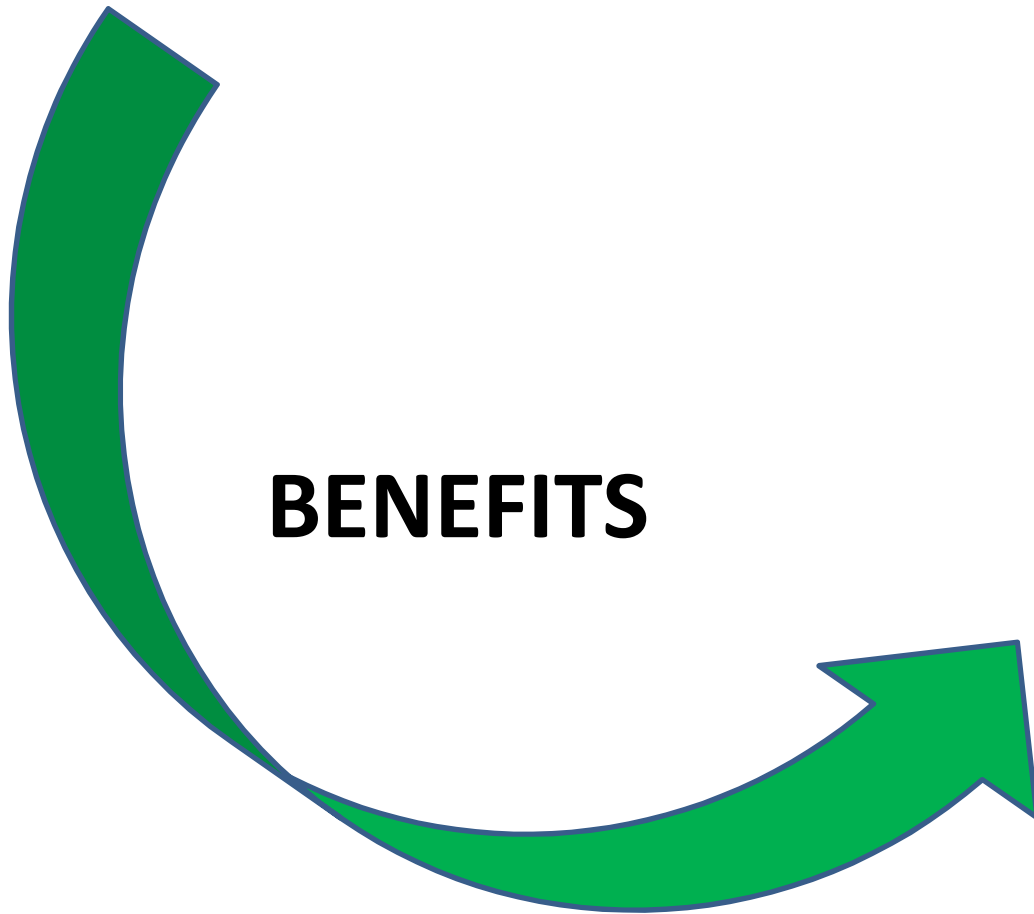
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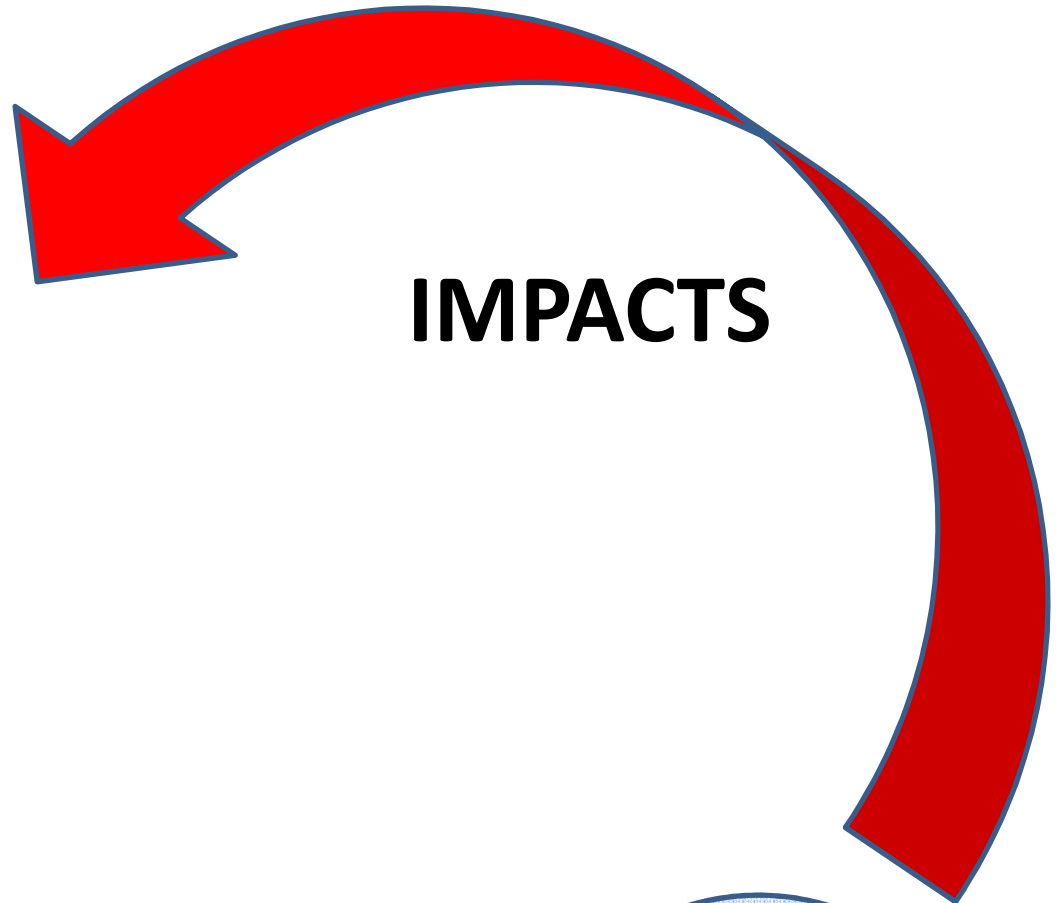
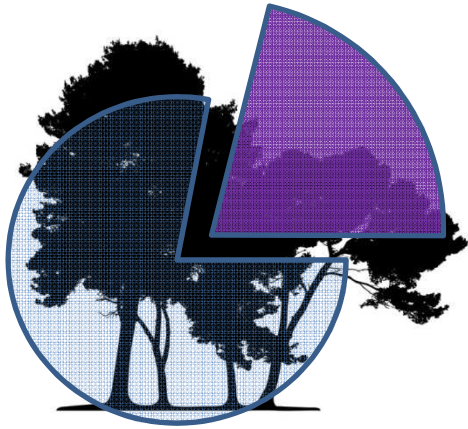
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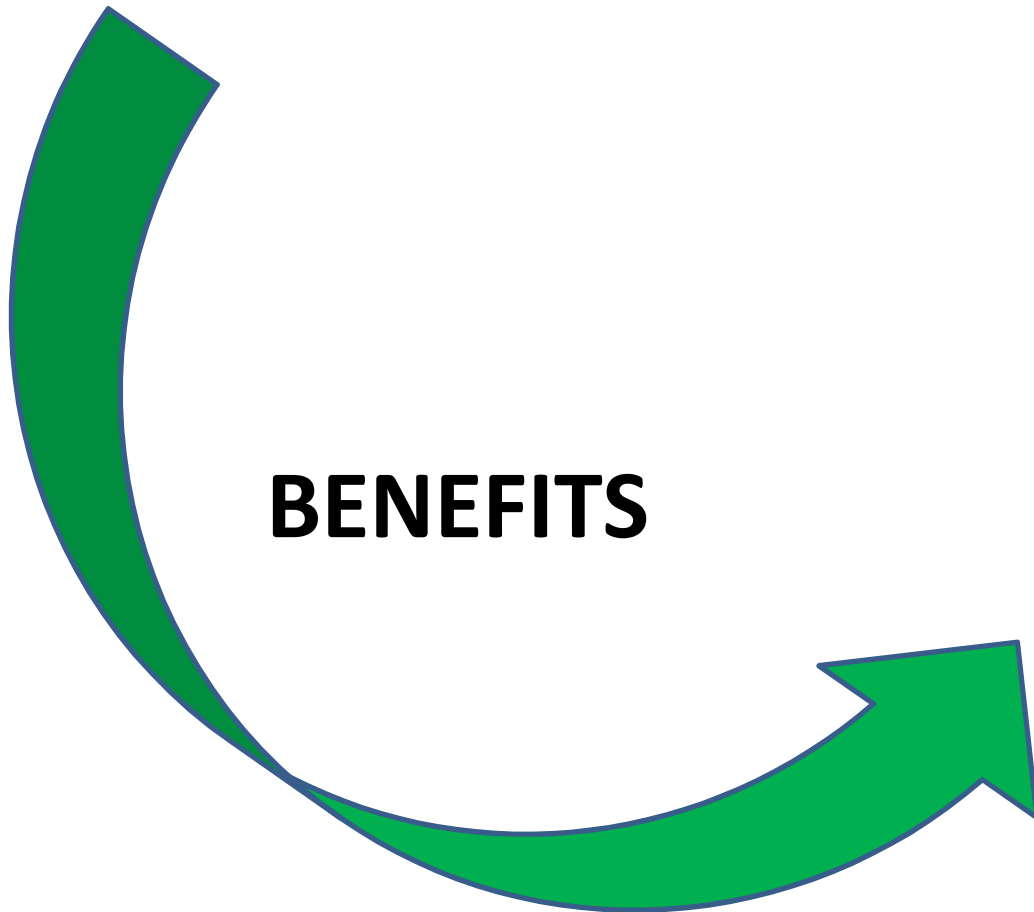
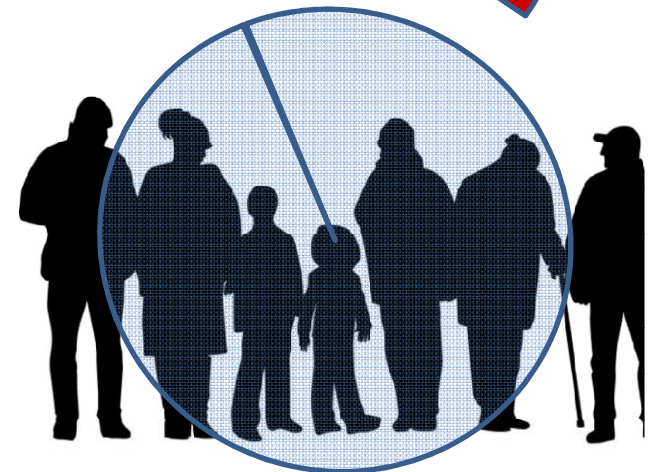
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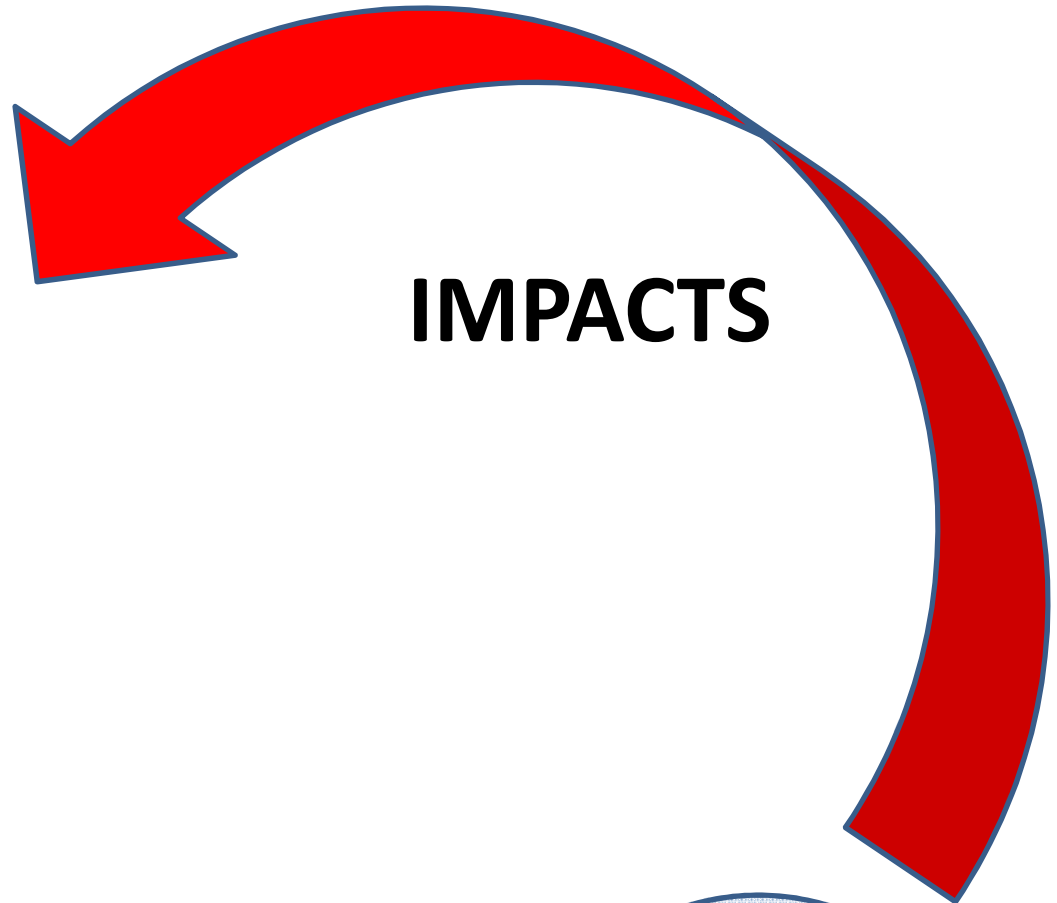
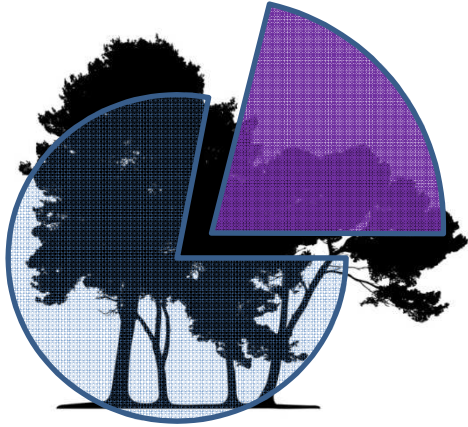
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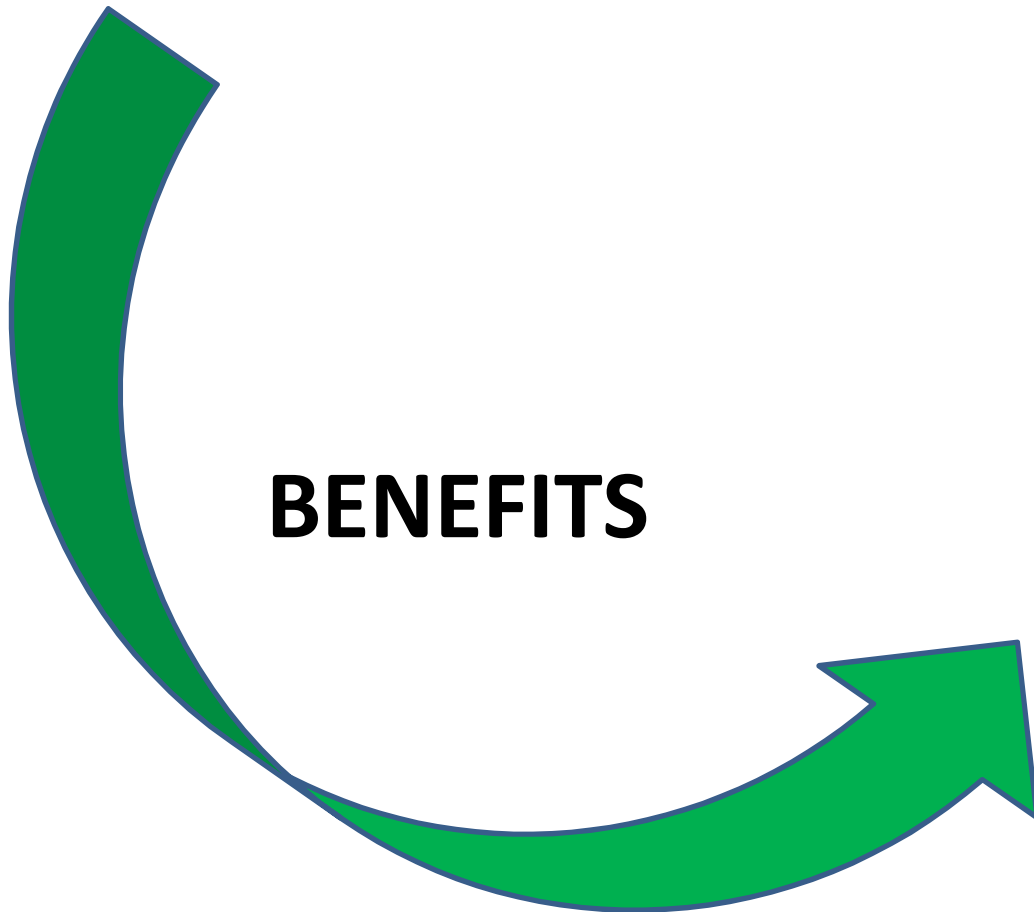
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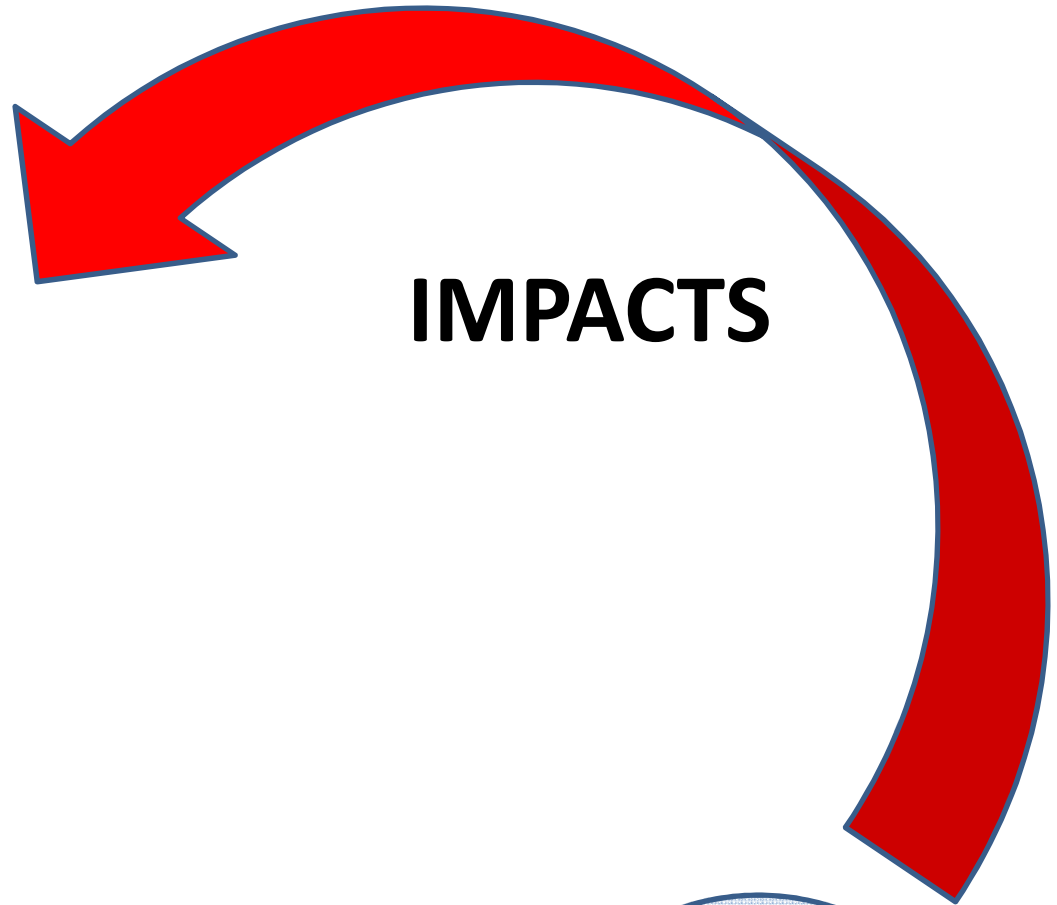
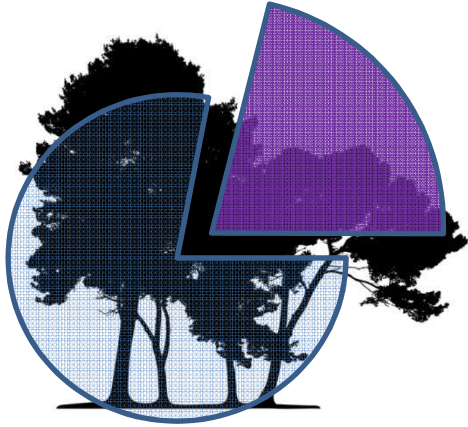
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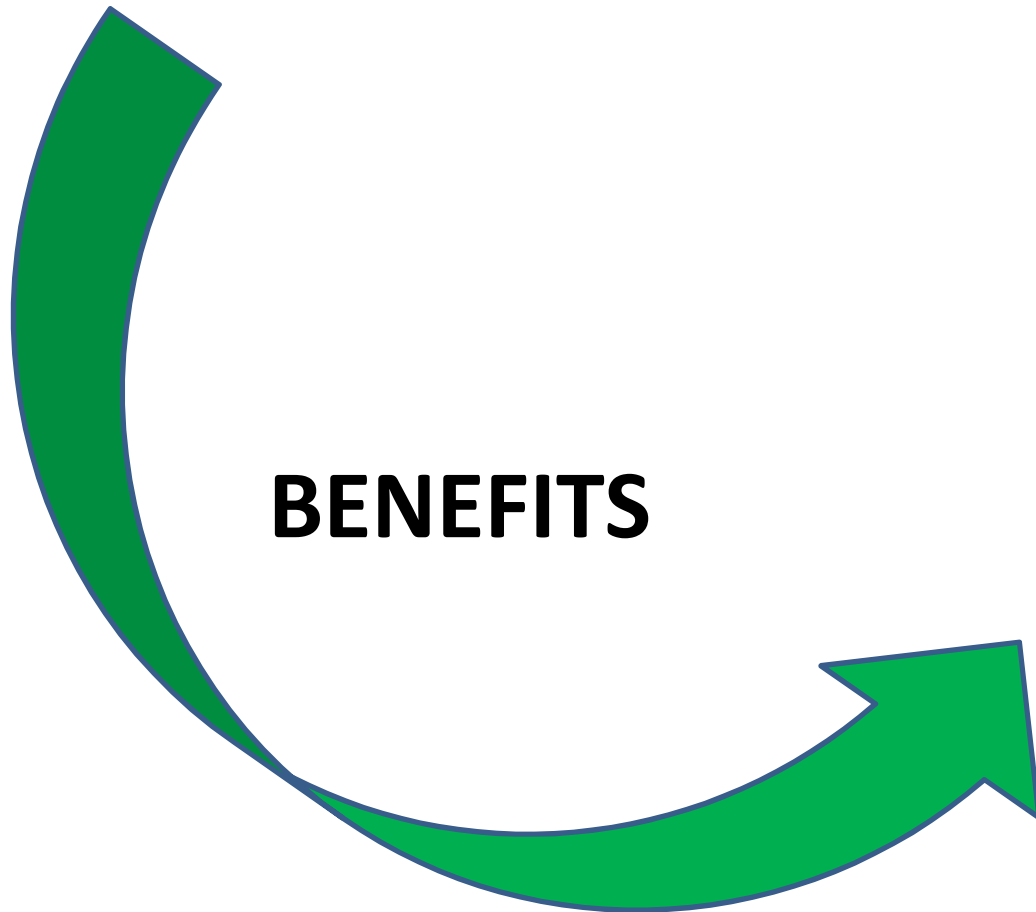
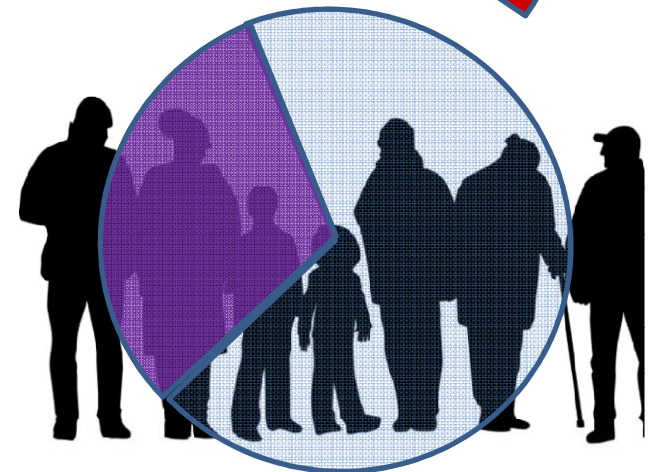
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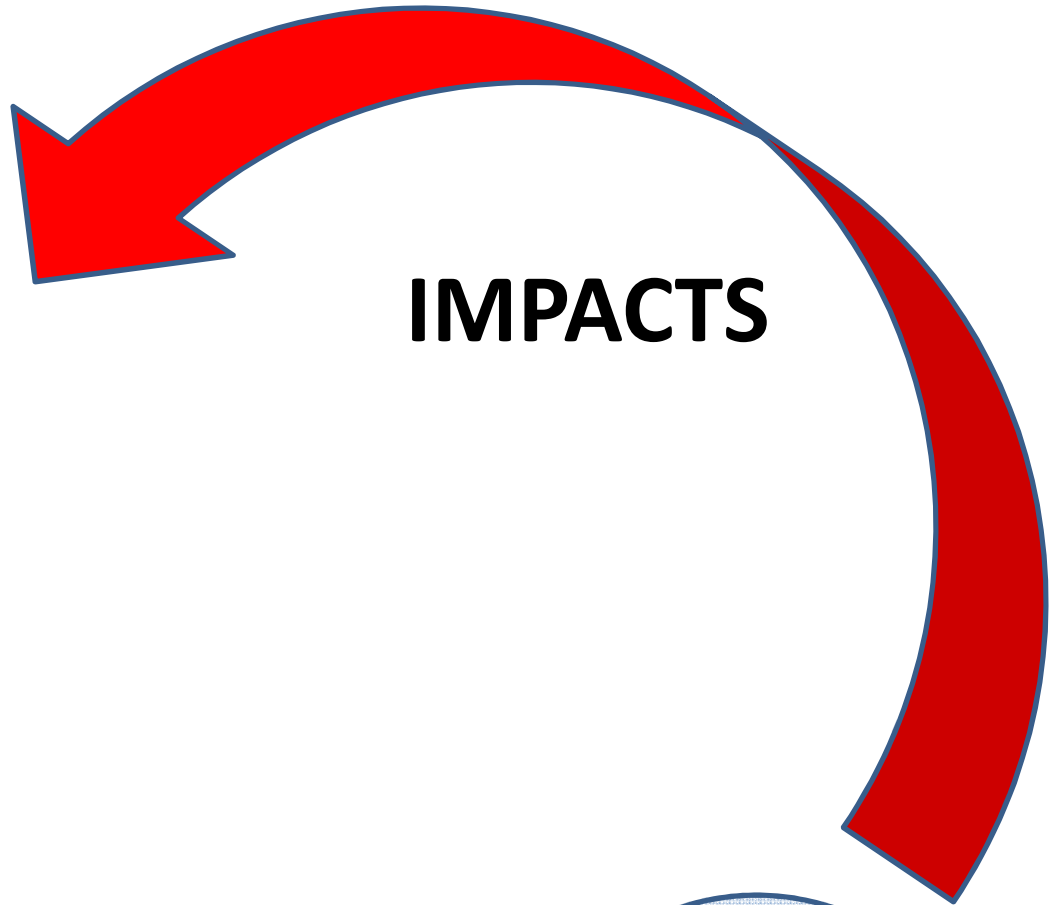
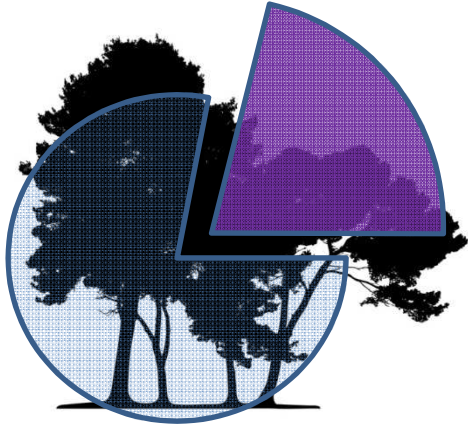
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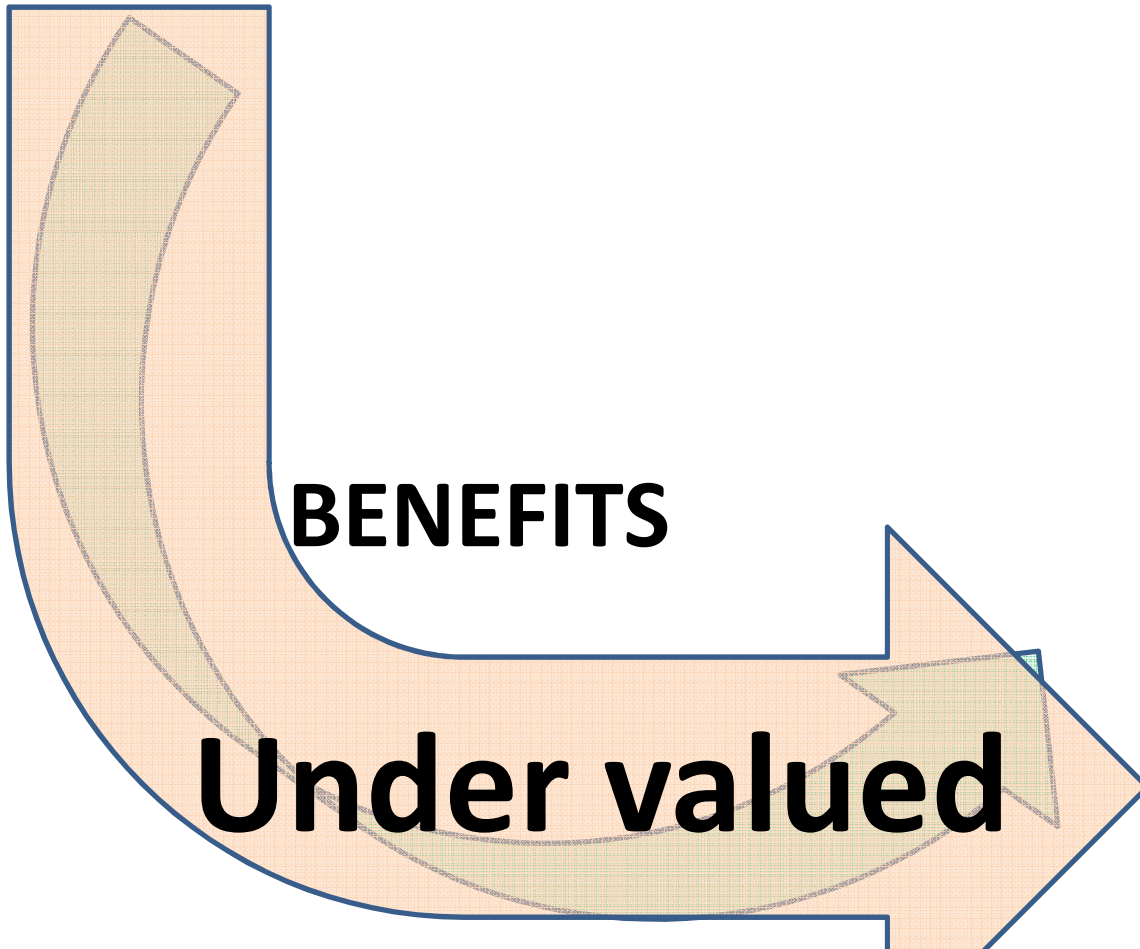
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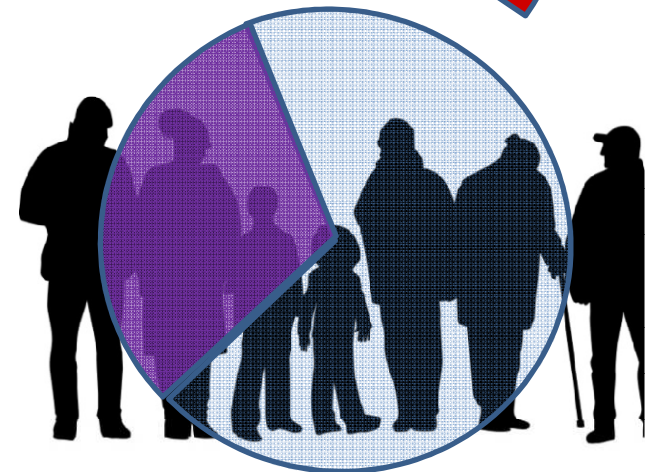


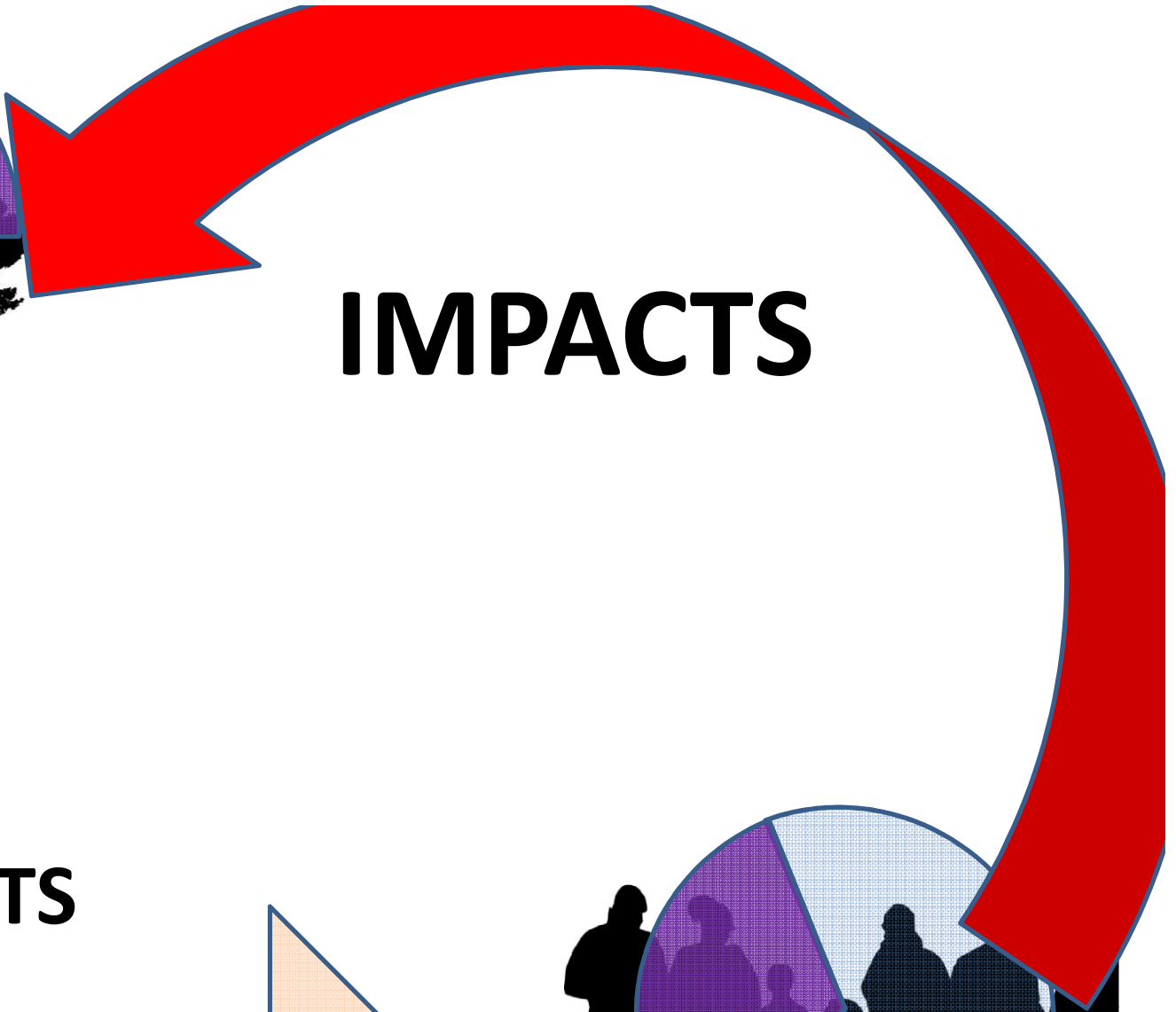
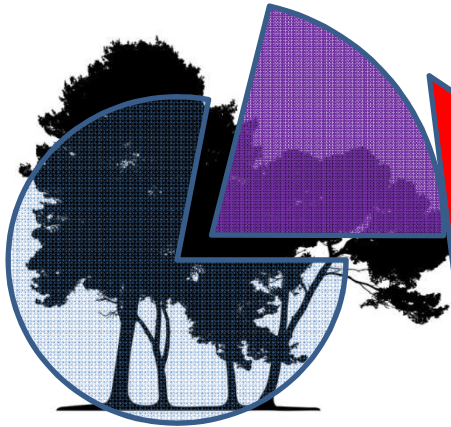
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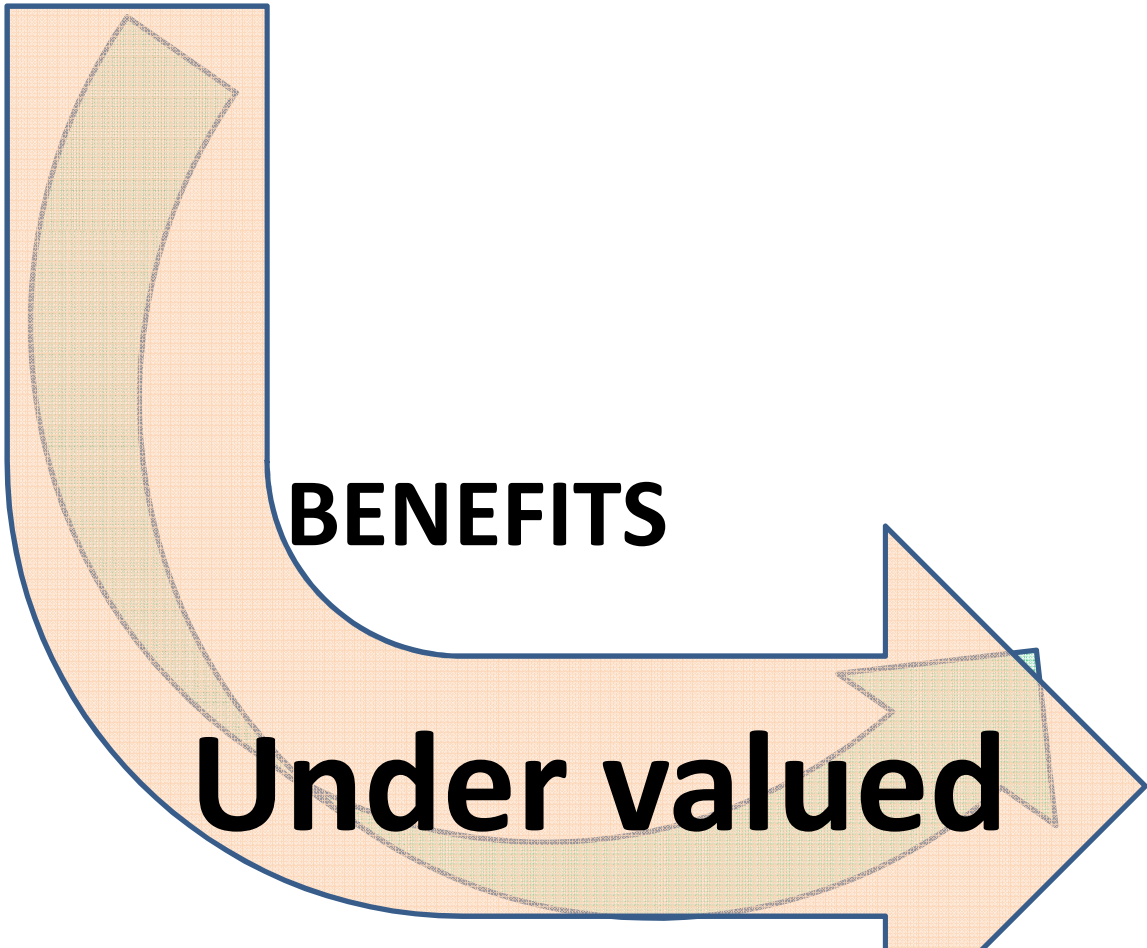
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Under valued



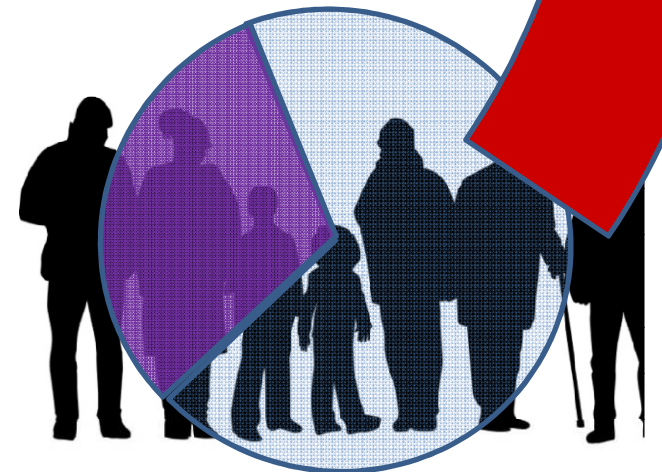


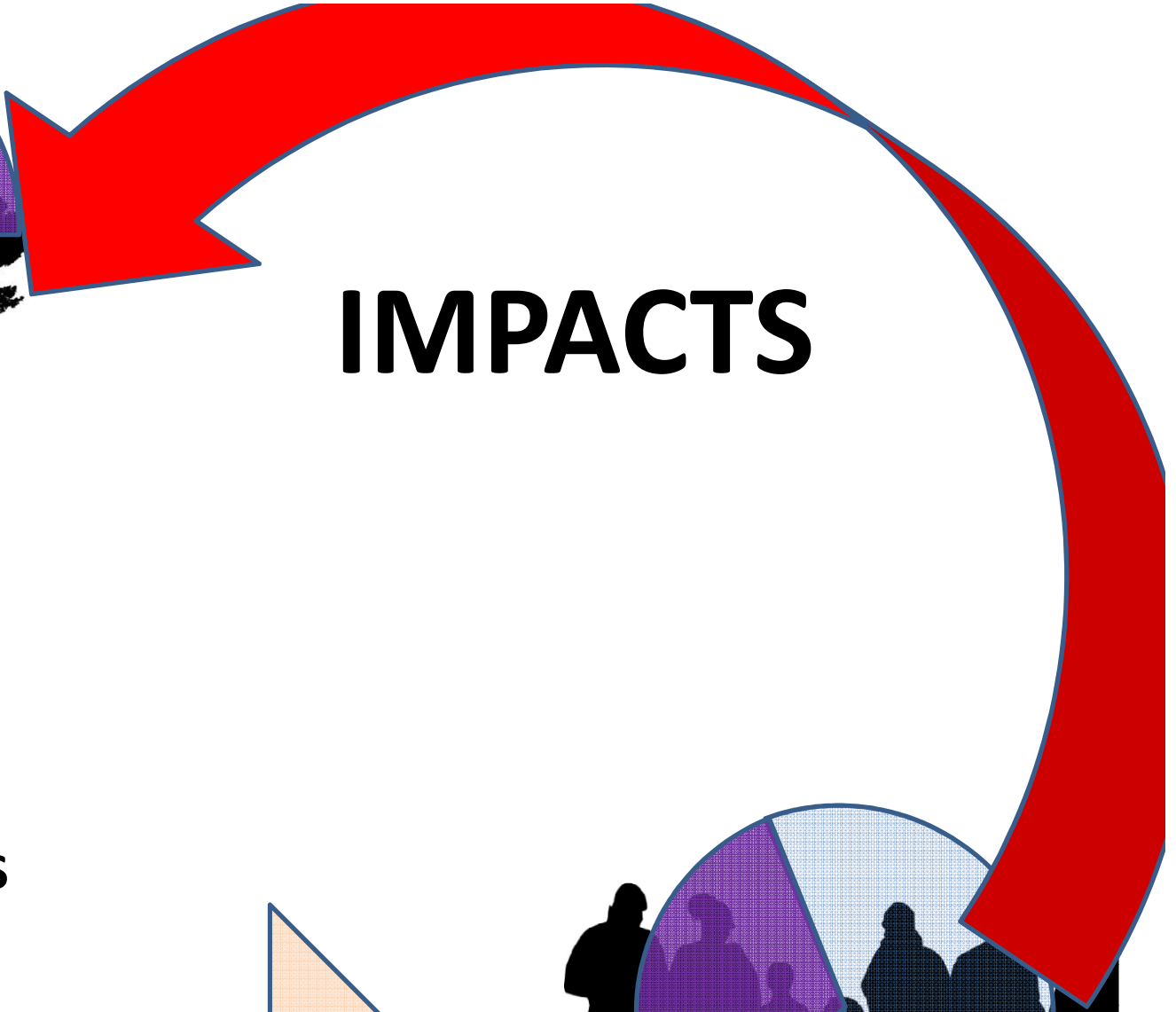
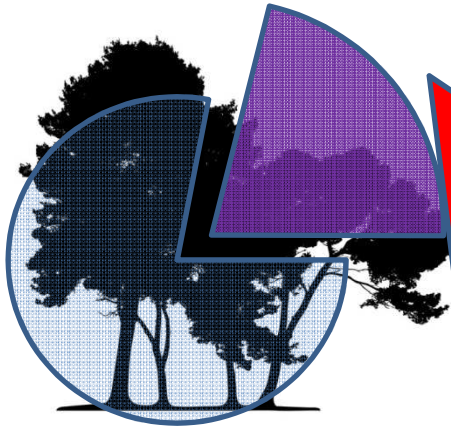
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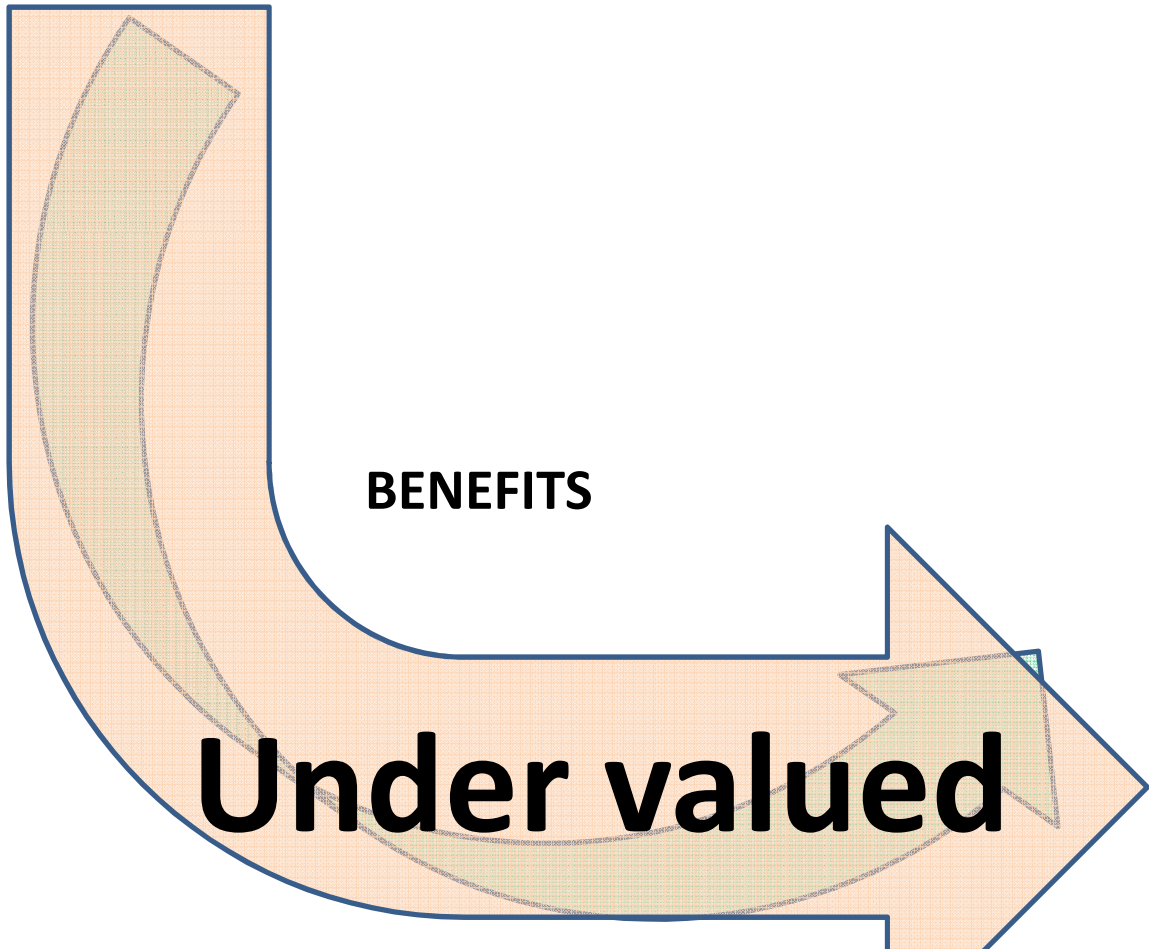
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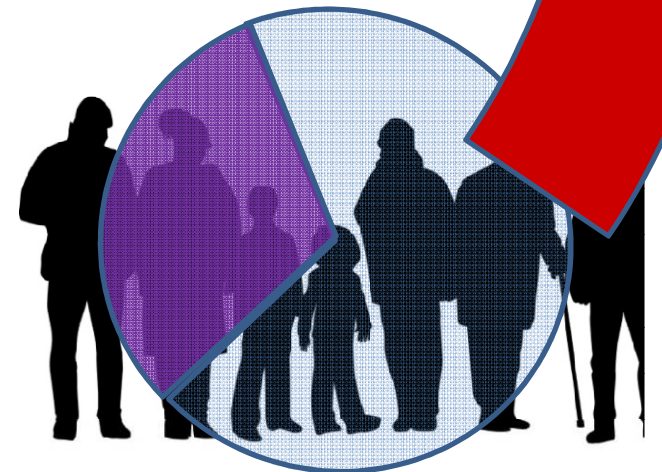


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BENEFITS

Under valued



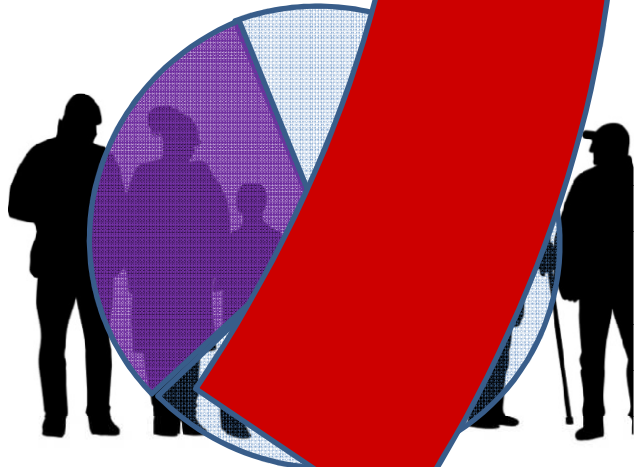


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BENEFITS

Under valued

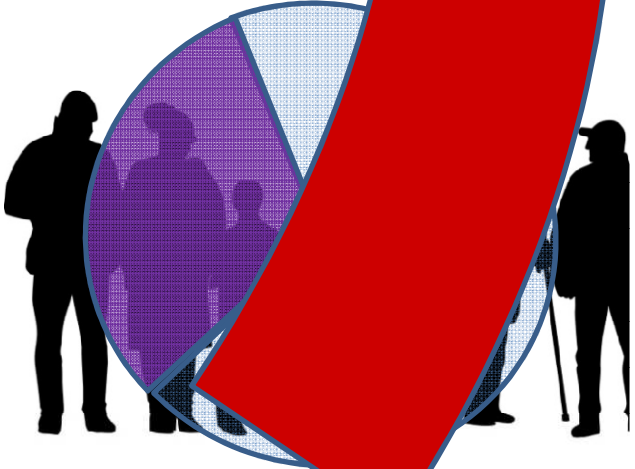




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Under valued

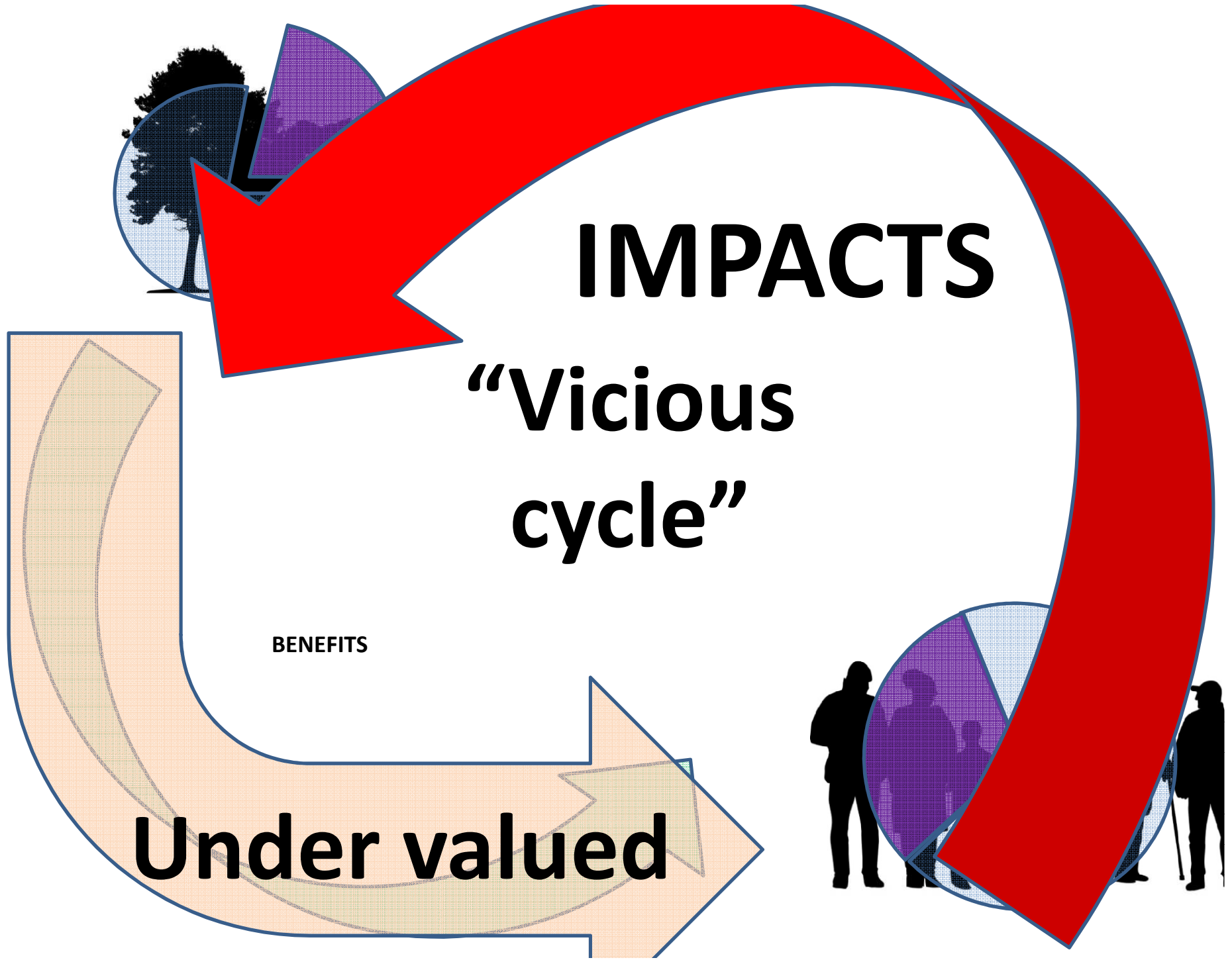


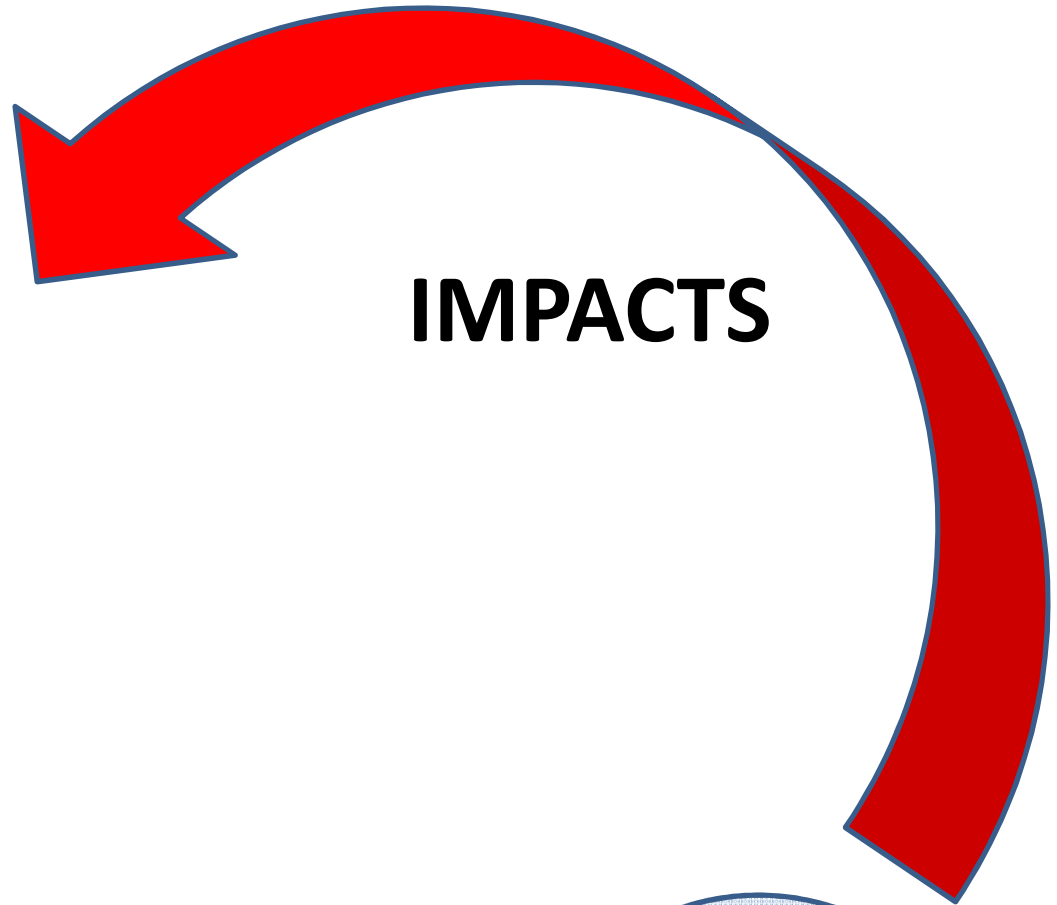
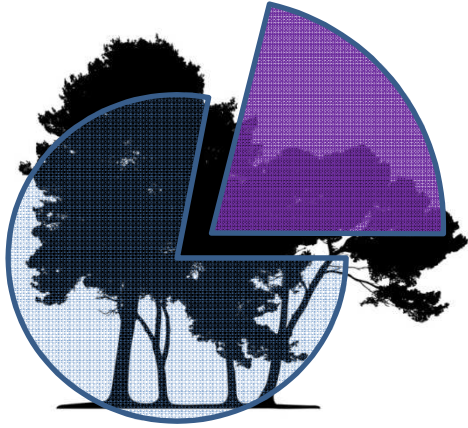
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“Vicious cycle”

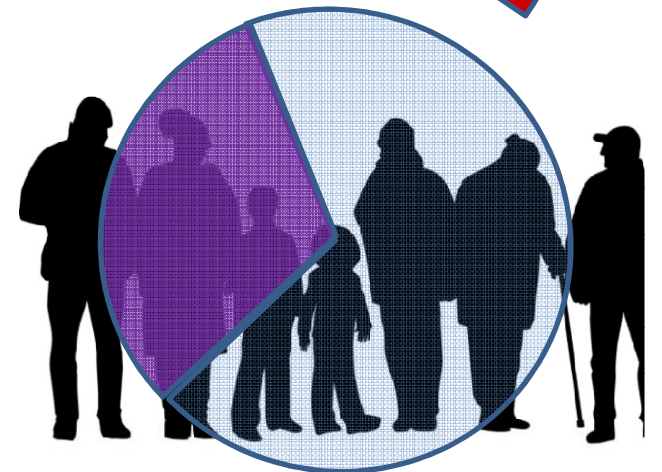
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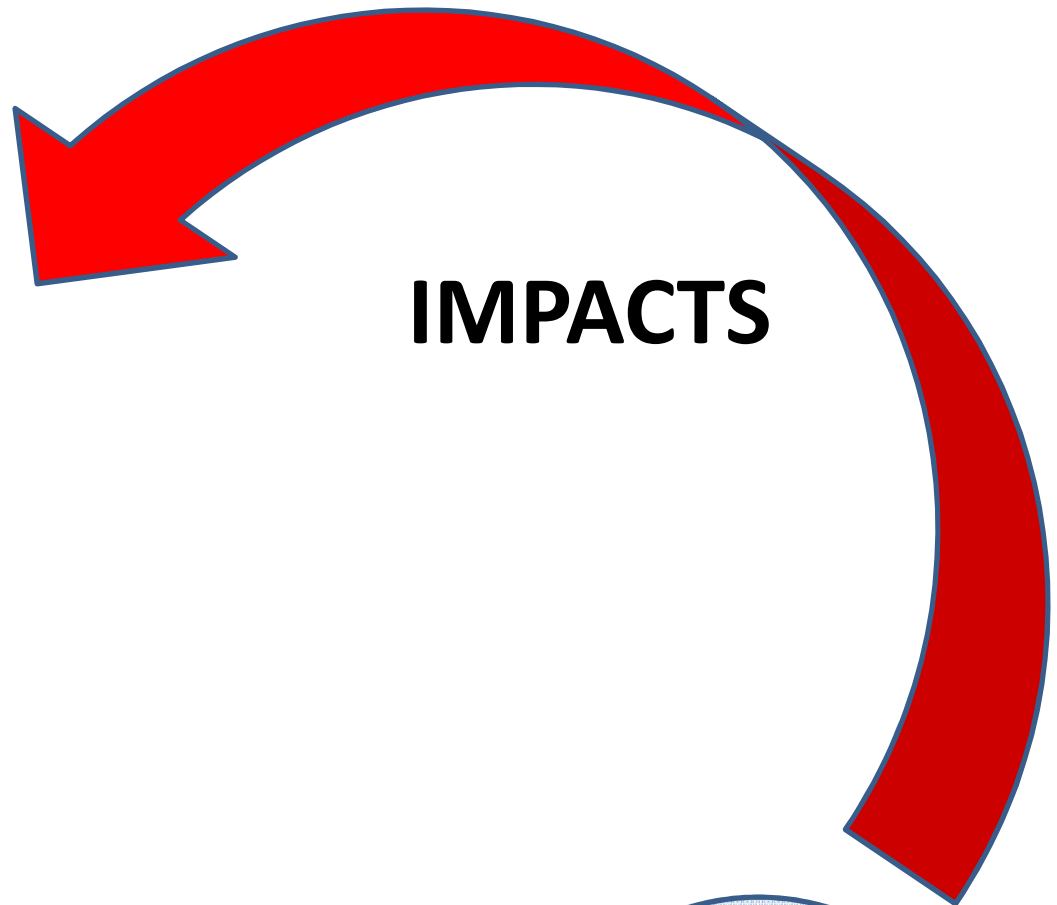
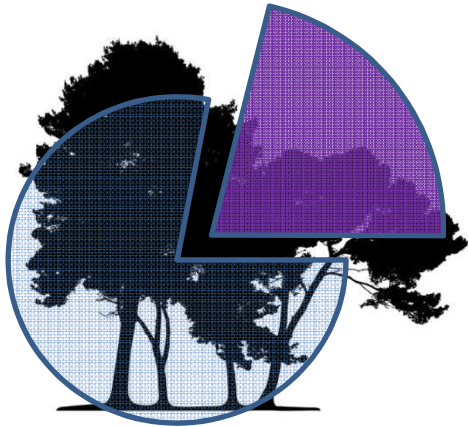




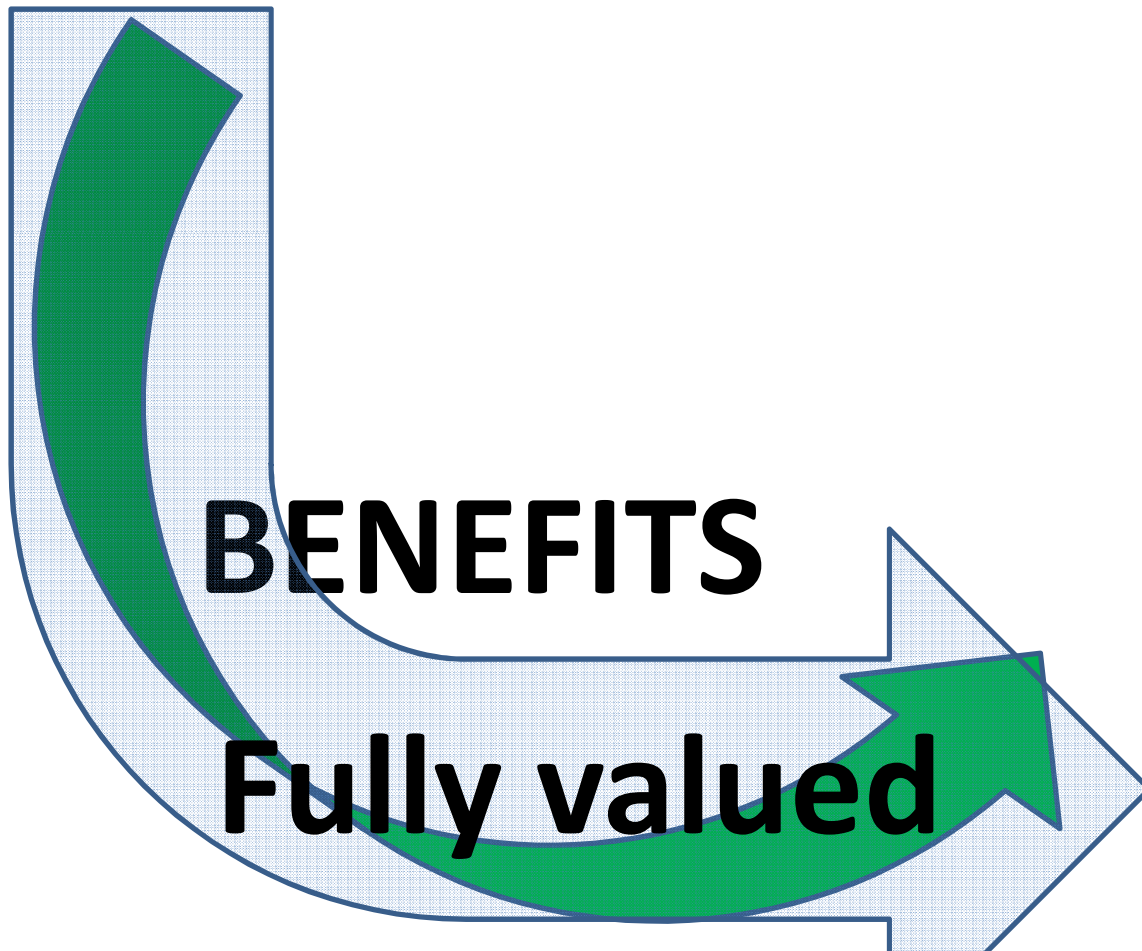
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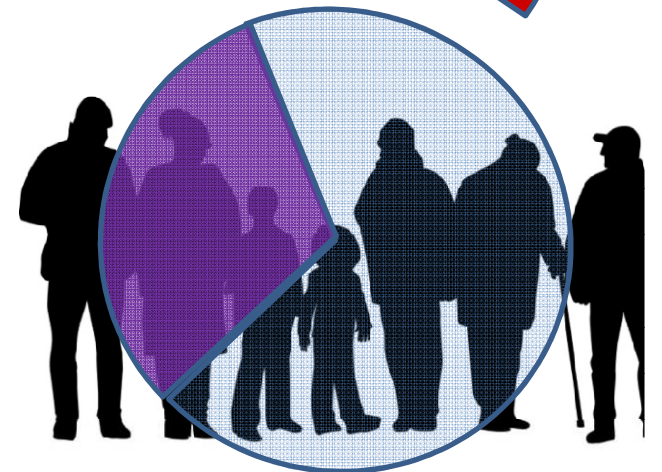


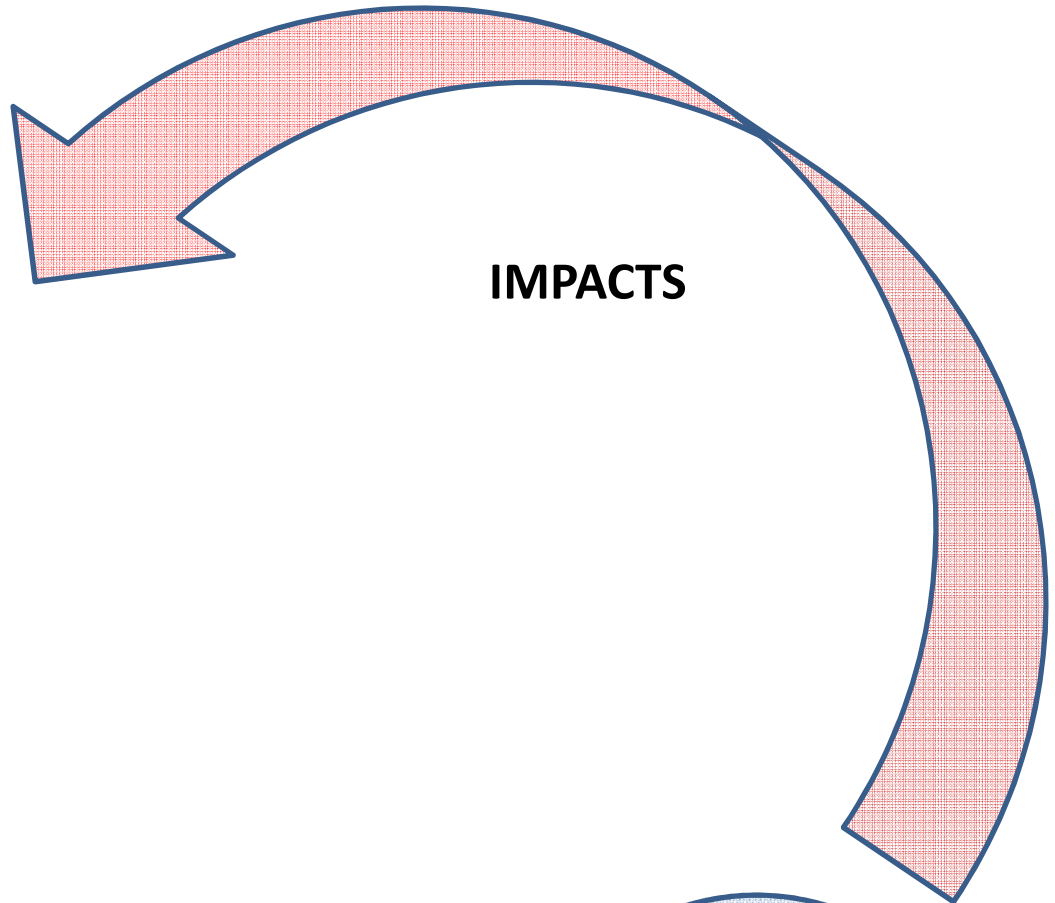
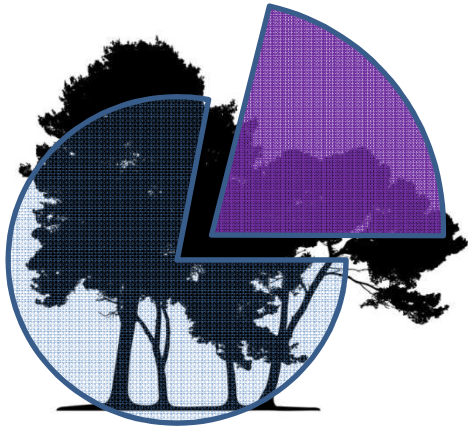
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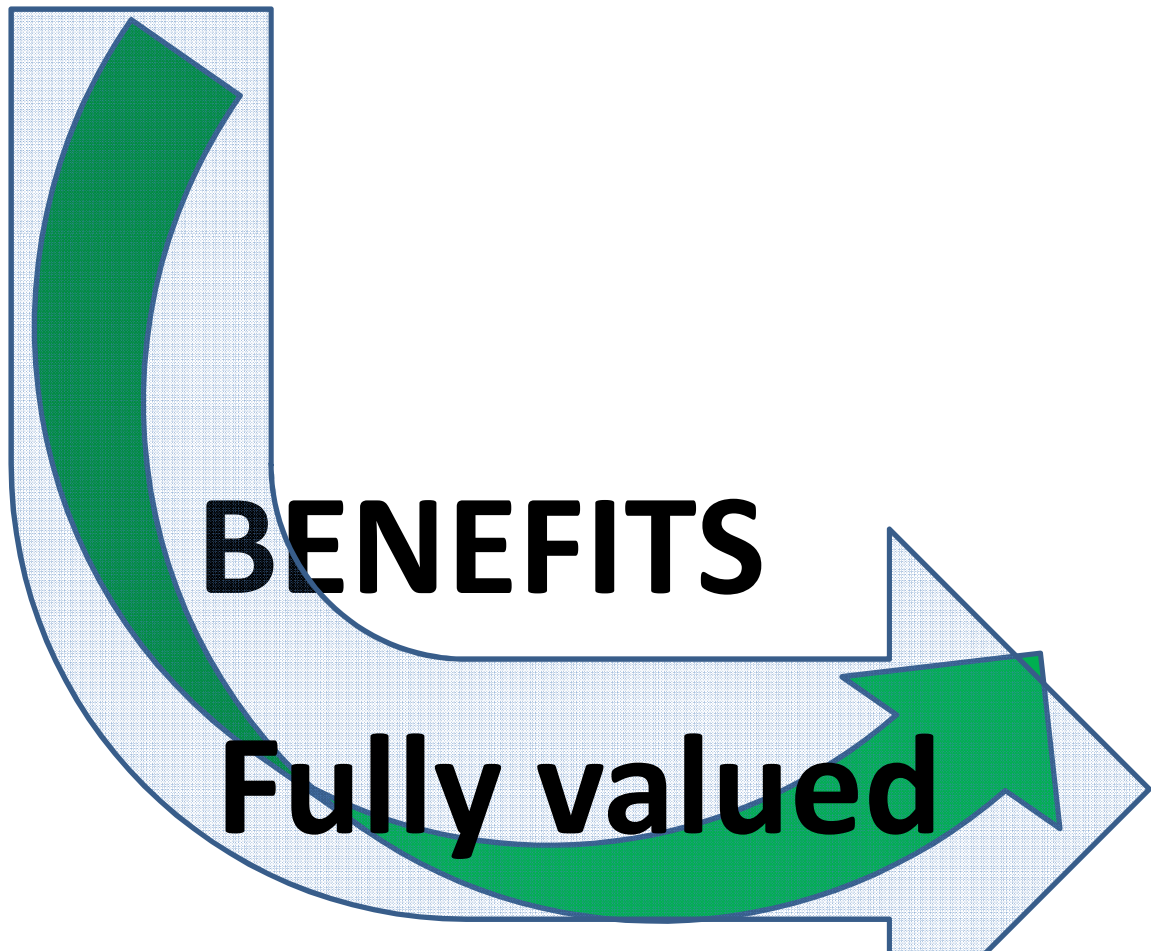
BENEFITS

Fully valued



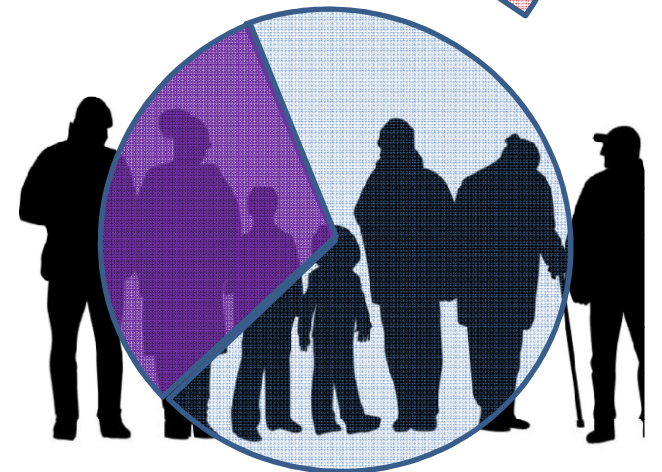


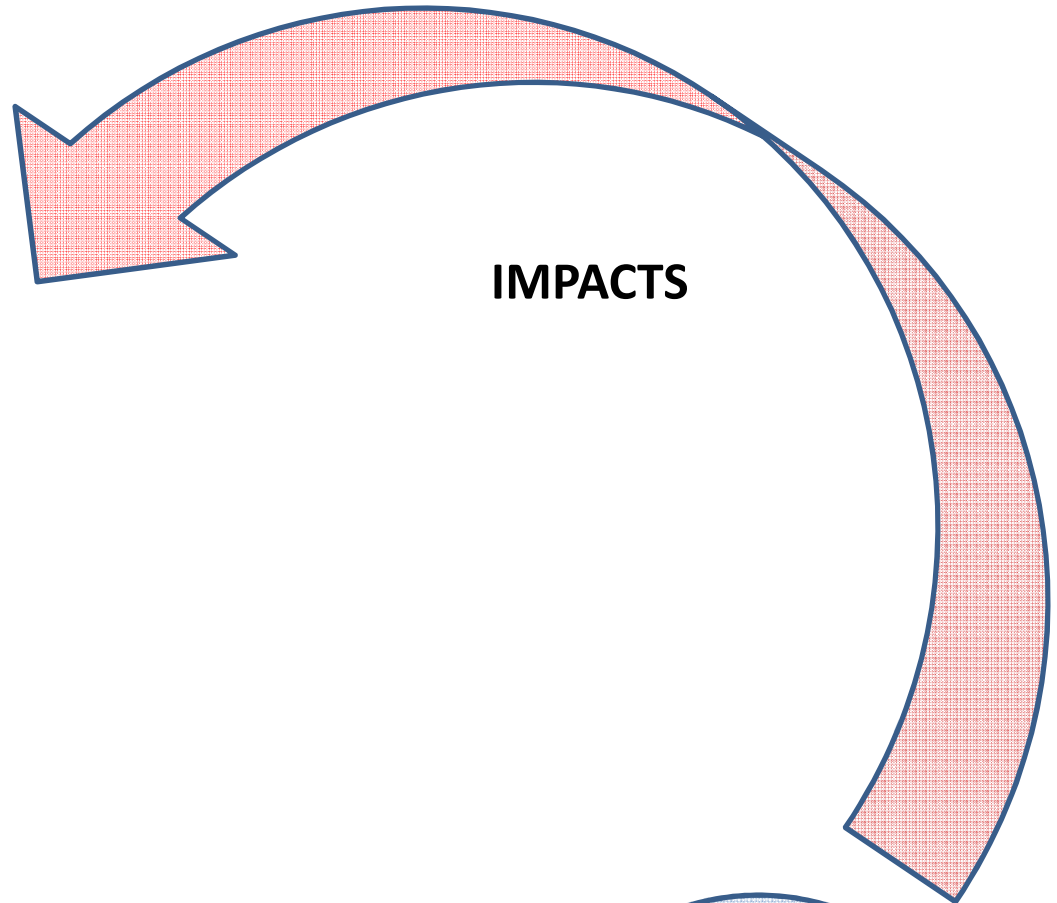
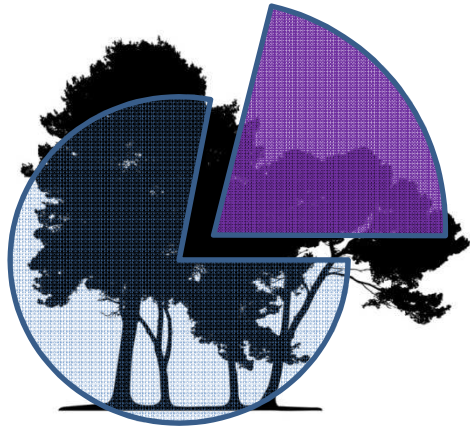
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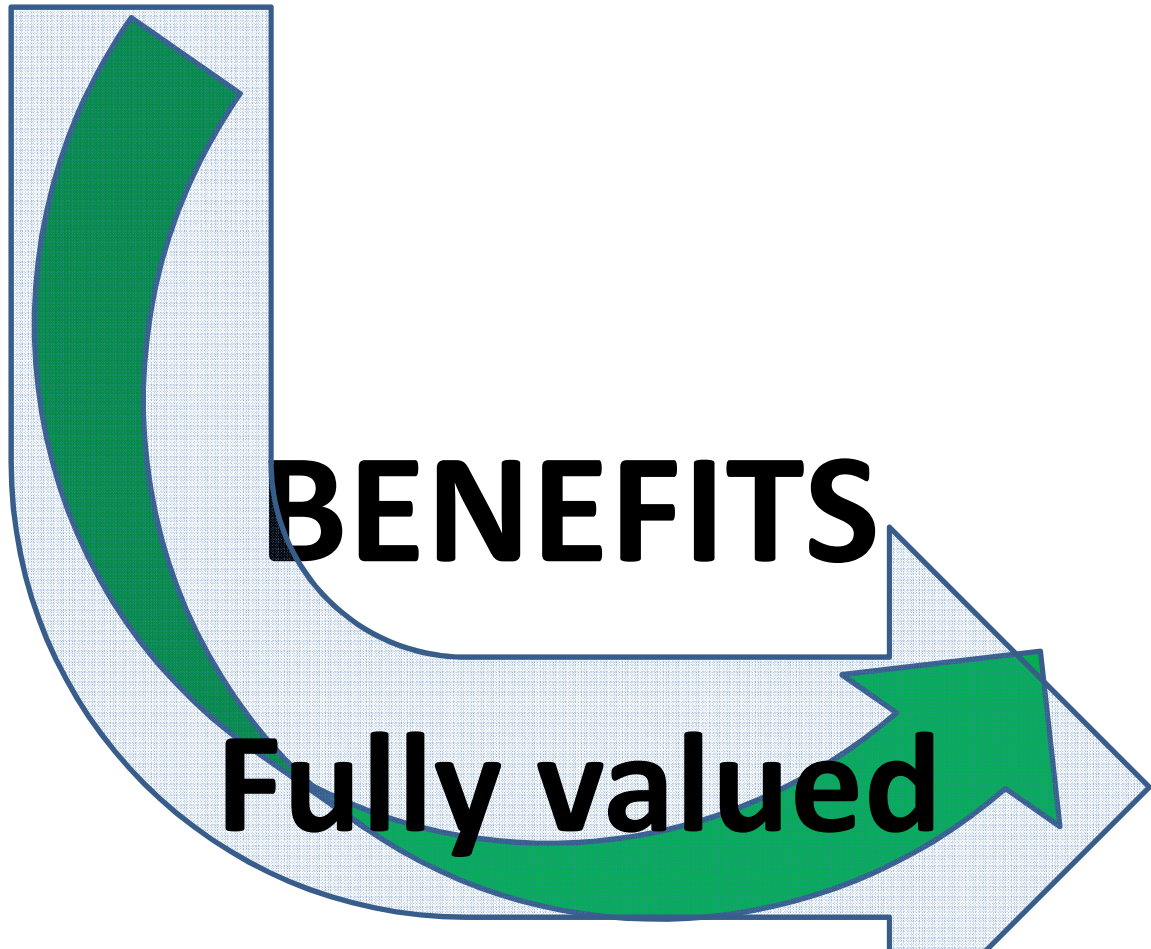
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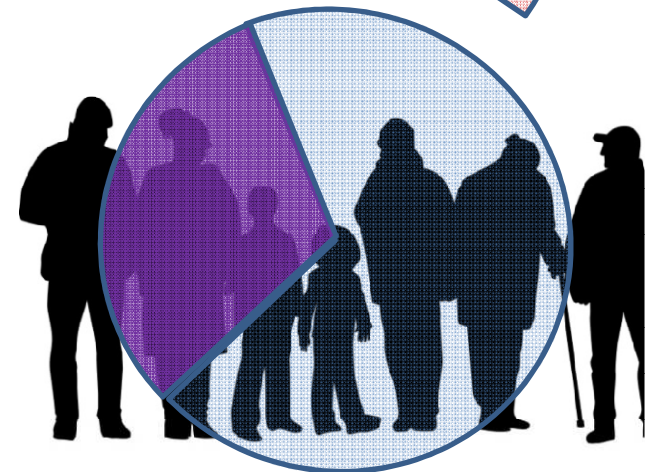


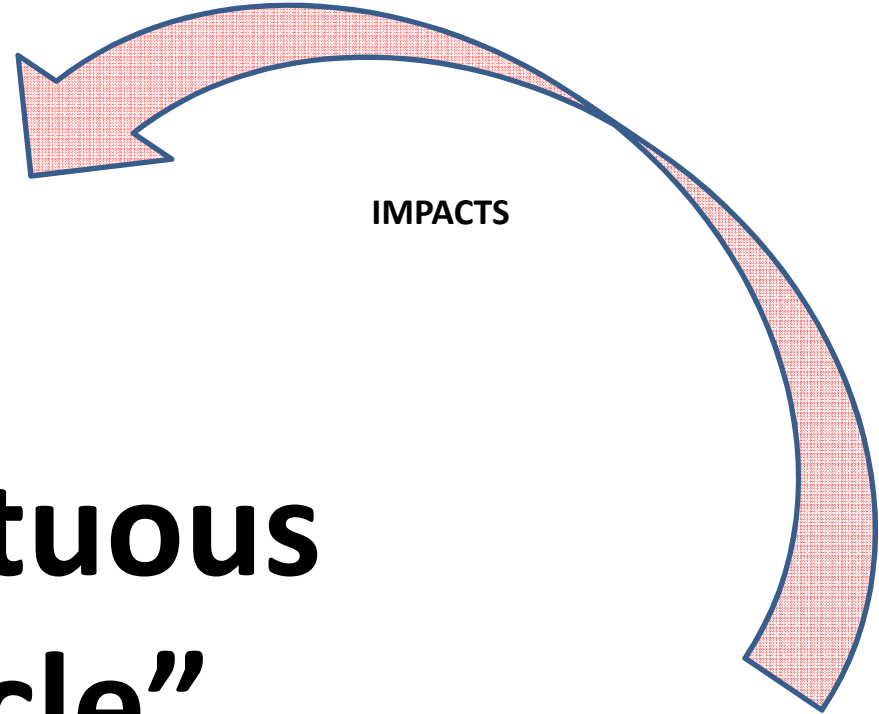
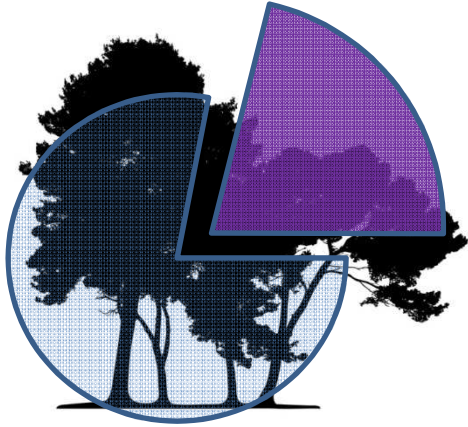
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BENEFITS

Fully valued

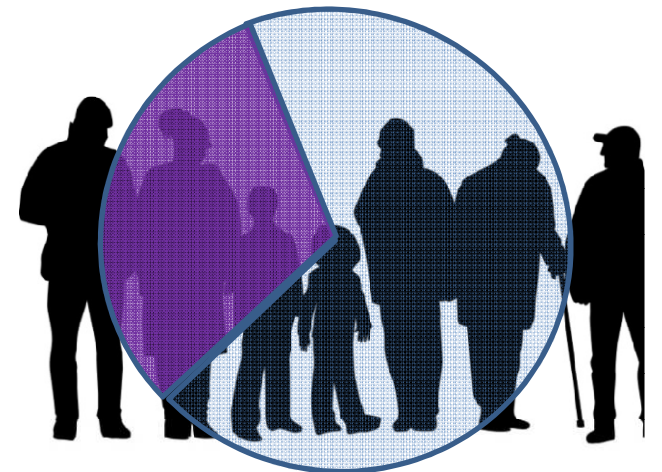




“Virtuous cycle”

BENEFITS

Fully valued



Under what circumstances is it important to assess and mainstream the values of protected areas and biodiversity?





...when there is a problem caused
by undervaluation



Examples of undervaluation:

1. A road is planned through a large protected area
2. Headwater forests are being degraded
3. Wetlands are being drained
4. Mangroves are being cut down
5. Rivers are being polluted from agricultural waste
6. Poaching is reducing wildlife populations
7. There is mining allowed in protected areas
8. Protected areas are under-funded

BUT...protected areas are not ATM machines



And protected areas are not piñatas...



Protected areas are a societal investment

SAVINGS DEPARTMENT

No. [REDACTED]

The First National Bank & Trust Company OF NEWTOWN, PA.

In Account with

Buck Taylor, Clerk
Frank R. [unclear]

Day	Deposited	Withdrawn	Balance	Day	Deposited	Withdrawn	Balance
July 27	100.00		100.00	Nov 30	109.26		1112.88
Aug 13	204		530	Dec 14	210		1326.88
Sept 4	199.00		808.00	Jan 3 11	438.00		1764.88
Sept 17	264.00		1072.00	Feb 4	26.9		2030.88
Sept 25	117		1189.00	Feb 15	26.9		2299.88
Oct 8	174		1363.00	Mar 1	19.2		2491.88
Oct 18	72		1435.00	Mar 18	24.51		2737.69
Oct 23	370		1437.00	Apr 29	16.9		2904.69
Oct 24	120		1557.00	Apr 8	93.81		2998.50
Oct 30	105		1663.00	Apr 12	136		3134.50
Nov 13	172.92		1836.52	Apr 18		1000	2134.50
Nov 19	117		1953.52	Apr 22	17.25		2151.85
Nov 21		1000	953.52	Apr 24	40		2191.85
				May 27	34.8		2539.75

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				May 27	34.8		2539.75

Economic valuation reveals the hidden
benefits of societal investments in
biodiversity protection...

...which leads to better decisions.



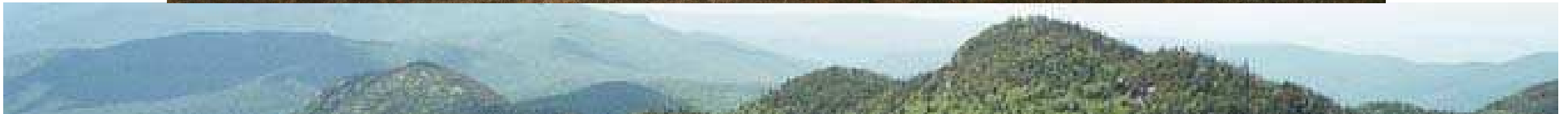
Steps in Assessing Protected Area Values

1. Clearly define the situation, audience and decision
2. Choose which benefits and services are included
3. Choose valuation method for each benefit
4. Develop measurable indicators
5. Analyze the economic and social value of benefits
6. Communicate the results to key decision makers



STEP 1

Clearly define the situation, audience and decision



STEP 1

Clearly define situation, audience and decision



STEP 1

Clearly define situation, audience and decision



STEP 1

Clearly define situation, audience and decision



STEP 1

Clearly define situation, audience and decision



STEP 1

Clearly define situation, audience and decision



STEP 1

Clearly define situation, audience and decision



Problem that valuation will solve: Existing levels of protection (.2%) and existing management are insufficient to sustain saiga populations, upon which major ecosystem services, livelihoods and human wellbeing depend



STEP 1

Clearly define situation, audience and decision

What is a problem in your country that valuation can help to solve?



STEP 2

Choose which benefits, goods and services are included



STEP 2

Choose ecosystem benefits and services that:

- Are associated with key national goals, such as poverty reduction
- Are easy to measure, have clear indicators and available data
- Are easy to communicate to key stakeholder groups
- Have the highest economic values
- Are the most important benefit across an entire ecosystem or protected area system



STEP 2

Choose which benefits, goods and services are included



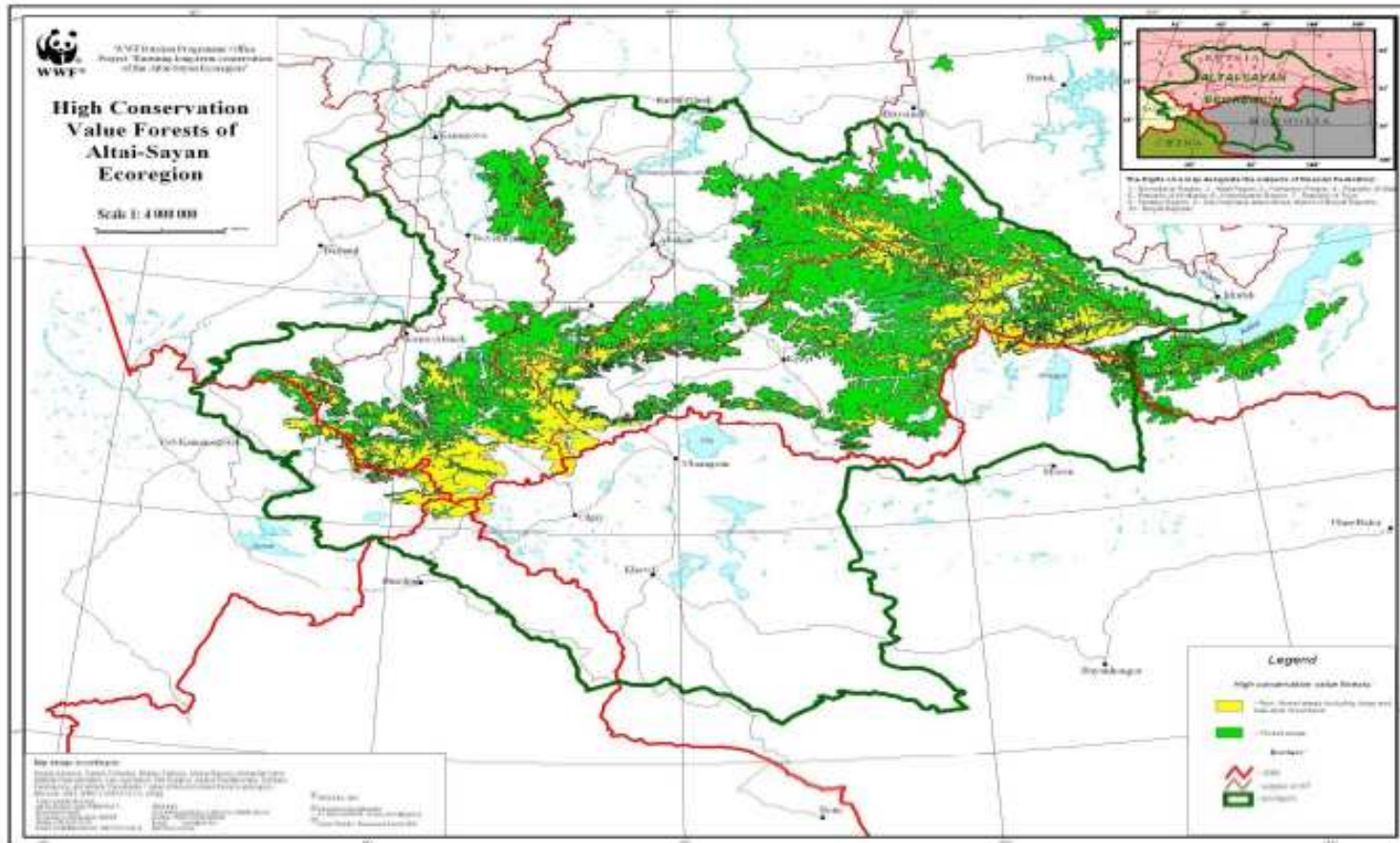
Sustainable livelihoods and subsistence



STEP 2

Choose which benefits, goods and services are included

Carbon storage: 3.21 billion tones of Carbon



STEP 2

Choose which benefits, goods and services are included in the assessment?

Which benefits:

- **Are most important to emphasize in your country?
Water? Employment? Food security?**
- **Are easy to measure, easy to communicate?**
- **Have the highest economic values?**



STEP 3

Choose a valuation method for each benefit/service

- Market price
- Replacement cost
- Costs avoided
- Net factor income
- Willingness to pay
- Contingent valuation
- Value comparison study



STEP 4

Develop measurable indicators

Ecosystem service	Potential Indicator
Food security	<ul style="list-style-type: none">• Average protein intake per person
Health	<ul style="list-style-type: none">• # and % of people using medicinal plants
Fisheries	<ul style="list-style-type: none">• List and volume of annual catch• # of people employed• Total \$US added to economy
Disaster mitigation	<ul style="list-style-type: none">• Hectares of avoided erosion• # of people protected from flooding
Water supply	<ul style="list-style-type: none">• Volume (cubic meters/second) from PAs• Hectares irrigated• Energy in megawatts from hydropower

STEP 4

Develop measurable indicators



- Number of families who rely on grazing
- Value of livestock that depends on grassland

STEP 5

Develop and implement valuation assessment



STEP 5

Develop and implement valuation assessment

- Develop description of work
- Develop terms of reference
- Develop methodology
- Develop budget for staffing, experts, communication
- Develop timeline
- Conduct assessment



STEP 5

Develop and implement the valuation assessment

Who will do the work?

Who will pay for it?

How will the work be done?

What is the timeline?



STEP 6

Communicate the results to key decision makers

Simple

Powerful

Actionable

Surprising

Targeted

Iconic

Concrete



STEP 6

Communicate the results to key decision makers



Kazakhstan agreed to a goal of establishing 6 million hectares of protected areas in key Saiga habitat by 2030

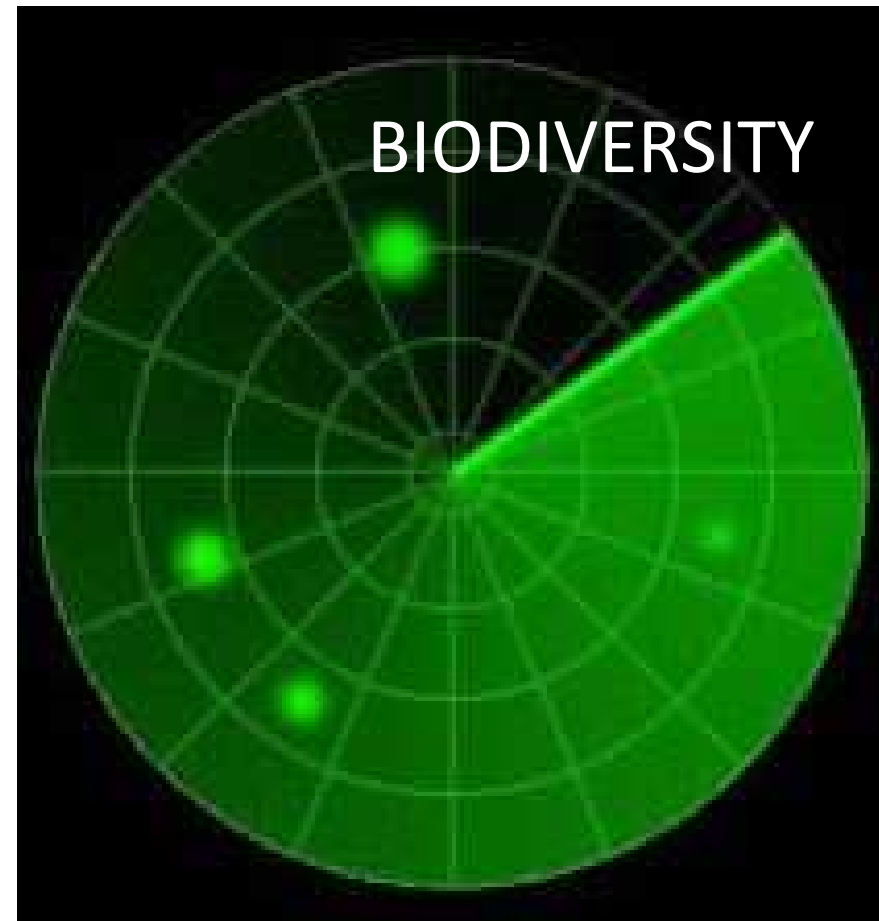
Mainstreaming and integration

To place
biodiversity into
economic decision-
making
frameworks...



Mainstreaming and integration

...in other words, to place biodiversity on the radar screen of major decision makers...



Mainstreaming and integration



...in order to make better societal decisions.



STEP 6

Communicate the results to key decision makers

How will you communicate the results of the valuation study?

Who is your most important target audience?

How will you make your issue their issue?



Exercise -- Example

Exercise: Choose a specific case in which there is a problem caused by the undervaluation of a protected area. Using this case, discuss some ideas for completing each step. Be as specific as you can. Then discuss a) how you might integrate and mainstream this value into the economy and sectoral plans; and b) whether or not you think the valuation plan and the integration/mainstreaming plan will resolve the problem that you have identified.

<i>Step 1: Clarify the context</i>	<i>Step 2: Identify the benefits and services</i>	<i>Step 3: Choose the methodology</i>
<i>Step 4: Identify indicators</i>	<i>Step 5: Assess the PA and biodiversity values</i>	<i>Step 6: Communicate the results</i>

Steps for sectoral integration and mainstreaming:

Sector/planning process	Opportunities for integration and mainstreaming of protected area and biodiversity values

Context:

Mangrove forests are being destroyed, resulting in the collapse of fisheries



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Benefits:

Local fisheries
and food security

Local livelihoods



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Approach:

Market value



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Indicators:

- Tons of fish consumed
- \$ earned in revenue by community
- Protein consumed



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Steps for sectoral integration and mainstreaming:

Sector/planning process	Opportunities for integration and mainstreaming of protected area and biodiversity values

Plan:

Valuation team to oversee study as part of NBSAP revision

National consultant to conduct study and then peer review



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Steps for sectoral integration and mainstreaming:

Sector/planning process	Opportunities for integration and mainstreaming of protected area and biodiversity values

Communicate:

- Media campaign aimed at coastal communities
- Targeted meetings with energy sector

