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Extended Commentary: Envisioning a Changed Environmental Policy

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Extended Commentary:
Envisioning a Changed Environmental Policy

It is painful to see the United States squandering its vast but not unlimited financial resources on projects that are not helping society. The most poignant example: The United States currently spends billions of dollars ($35.4 billion in 2019 with forecasts showing that number dramatically increasing through 2028) maintaining its arsenal of 4,600 nuclear warheads while having no intention of using them, for fear of setting into motion the mutual destruction policy of our nuclear strategies.[1] If the United States shifted those billions spent on nuclear weapons into environmentally friendly programs, the benefits would be momentous. Varied and necessary fields of research could move forward—the possibilities are endless, but to use one small but impactful example—further study into the use of soil macrofauna on soil structures in agriculture could be funded. With funding that many now consider wasted in areas such as keeping nuclear weapons, soil engineers could oversee the implementation of new soil products leading to ecological and financial benefits for farmers and growers.[2] This is but one small element of a potential sustainable American environmental policy if the U.S. moved proper funding into this area.

A well-funded environmental policy would also make social scientists more relevant in both the private and the public sector. Professor Ronald Inglehart notes that social scientists will need to research—and influence—the changes in the economies, militaries, and social environments, and it is advised that those same social scientists manage government grant programs, providing the manpower behind instituting these changes.[3] The overall evidence sums up that the reality of our changing environmental policy will require great risks and hard work to undertake, but the benefits drastically outweigh the risks.

GDP alone is no longer enough when trying to gauge the success of the American economy. Measuring economic growth in comparison to energy usage needs to become a key indicator. The inverted U-Shape Method can help monitor the relationship between economic growth and energy usage. The U-Shape Method accounts for the fact that more energy will have to be expended to change our current overall energy output and reduce our carbon dioxide levels initially to balance out economic growth, but then energy output would curve downward with the use of natural practices being stabilized with a modern economy.[4] One study concluded that, due to the use of biomass products being implemented into the U-Shape Method, canola farming produces higher yields, better sales, and lower energy costs by percentages going from 3.8 percent to 1 percent on the farms where the practices were instituted.[5]

W there is clearly wasteful spending in the military when it comes to weapons (not just nuclear, but that is the most blatant example) and cutting the budget in these areas could fund better environmental policies, the aim is not to cast the military as a villain. The American military has made strides in the areas of training, recruiting, and adjusting personnel to the priorities of combating environmental threats parallel to the methods suggested. The military has also adjusted to the standard of becoming revolutionary in its technological development not only to save money, bullets, and bodies on the battlefield through cyber warfare, but also to mitigate the environmental damages caused by physical warfare, both in human and non-human based areas.[6] Even under the Trump administration, which weakened environmental regulations and climate change reports, the Defense Department continued to study the projected effects of climate change. Their concerns are founded: A 2019 report concluded that seventy-nine military bases—including the largest in the world in Norfolk, Virginia—will be affected by rising sea

levels. Furthermore, the Defense Department sees a future where most of its resources are spent on disaster relief missions, rather than protecting the U.S. from other countries.[7]

The UK Military has also joined forces with its Committee on Climate Change regarding its country's housing standards. To meet 2050 emission reduction costs in both private and military housing, the two governing bodies have agreed to a complete and total decarbonization of heating in houses through the Clean Growth Strategy.[8] The most extraordinary effort by the military to combat environmental crises comes from international burden-sharing, whereas NATO and the EU have come to the agreement that sharing resources is healthier for the environment, better for their collective alliances and abundance for their individual countries.[9] Hence, to talk about diverting some funding from weapons towards environmental policies is not anti-military; the military is already showing itself to be part of the solution in some areas.

The potential to provide further opportunities to private citizens in industries that support the efforts on protecting our planet's health are also numerous. Much of the STEM field is dedicated to the success of environmental health, which is why both paid and unpaid roles are being extended to graduates in the international community thanks to a similar program proposed in the UK.[10] More science-based jobs will become available in the near future as there will be a need for personnel to modernize businesses to electric technology, which is cleaner for use and makes more money for investors involved.[11] People from all industries, but especially those related to the social sciences, accept the fact that everyone must become "environmental psychologists" and that working in public policy and engineering careers will always need to evolve to meet the needs of our planet before our own self-interests.[12]

Interestingly, a field that offers great potential for combining military efforts, strategies, and funding to not just environmental, but human, solutions, is space exploration. As

governments realize that both terrestrial and extraterrestrial elements can affect our planet, many coping mechanisms for society in the face of climate change, disease and projectiles from space have been in creation since 2014.[13] Not only has our government taken steps to protect our people from the dangers of space, the government has also partnered with private companies on accessing the benefits of space and how they can affect us positively on Earth, such as the measuring, extracting, and recycling of water on asteroids and research through the International Space Station.[14] Furthermore, scientists have calculated that having an Earth-orbiting craft that measures the physics of motion above our atmosphere will assist in designing further spacecraft that is specifically built to carry humans off world permanently and back, rather than temporarily like a rocket.[15] While some of these concepts might only come to fruition decades in the future, "climate change is [already] a poster child for the critical role of space data, as satellites provide necessary information about climate change.[16]

While the policy to adjust economies, governments, militaries, and basically the entire global way of life to become more environmentally balanced has been tried and proven to work, it is still extremely ambitious with a lot of opportunities to fail if not done correctly. That said, there needs to be discussion on the limitations of the practices, testing, and known scientific research that will give weight to the previously proposed policies. Discussing the short falls can lead to necessary solutions.

The need for further testing of new agricultural practices is a clear priority. To return to our earlier example, the practice of using soil macrofauna in biogenic aggregates is only considered by soil ecologists, thus the resources and testing is limited to soil ecologists instead of farmers and other agriculturalists.[17] Furthermore, organic farming professionals also suffer from

a lack of implementations of their process due to a lack of testing.[18] The search for new and better environmental practices needs to be embedded in all professions to all for true growth.

The desire to change environmental systems worldwide is also limited by the available technology. While we have successfully tested and distributed new electricity technology in certain countries around the world, we lack greater supply chains, more investors in the technology, and compatible technology to parallel the new technology.[19]Additionally, the space-age technology that we are wanting to build, such as the mentioned Earth-orbiting spacecraft, is limited in funding as well and, even with the mathematical proof, will take convincing to fund further.[20]

There are still many governmental and political restrictions hindering a complete global military move towards environmental health. National militaries are still understandably prioritizing improving their technology to fight each other instead of coming together to fight environmental problems.[21] Also, even though the United States has standing orders that are designed to have more interagency partnership when it comes to environmental concerns, it is limited in its communication and connection between different agencies towards that goal, which will limit our government's ability to make the same connections with other nation's agencies to solve global problems.[22]

Further training and policy building is required for all personnel involved to combine the efforts of the military and environment both financially and globally. The military's massive budget can also be allocated to our much smaller energy, interior, and space budgets if only linked by some relevance. That relevance is that the survival of our species is a national security priority, which is why the military funding and training protocols should be merged with the other environmental agencies.

ENDNOTES

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