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A Student Group Review on Existential Risk

by

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Humanity is facing a range of challenges that are unprecedented. Some of these, those that threaten our existence, have been termed existential threats. In his book Surviving the 21st Century, Julien Cribb describes some of the most serious of these threats we are inflicting upon ourselves, including; ecological collapse, resource depletion, emergence of weapons of mass destruction, global warming, food insecurity, population and urban expansion, pandemic disease, dangerous technology and societal delusion. The aforementioned existential risks are deeply intertwined and cannot be dealt in isolation.

Drawing on the latest science and recommendations from round-table discussion, our team must uncover why society is in denial of the reality of threats that jeopardise humanity's existence, what it will take for bureaucracy and institutions to recognise these threats. Furthermore, we must evaluate whether a "commission on global futures" or research bodies such as 'Future Earth' is capable of delivering transformative change to a sustainable future in Australia and the world.

We hope that our research will have the capacity to educate institutions and the general public on the imminent dangers of these existential threats. In the long term, we hope that our publication will encourage current and future generations to develop tools that will safeguard the survival of humanity.

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Question 1) Why is the Australian community in general and our political apparatus specifically not taking the existential threats described in Cribb's book seriously?
By Emily Smith

Background
Humanity is facing a collective of existential threats, many of them the consequence of us undermining our own survival through the over-exploitation and destruction of the ecosystem services on which we all depend. Despite widespread knowledge and awareness of these prevailing threats, there is a deficit between people holding concern for the environment and pro-environmental behaviour (Kollmuss and Agyeman, 2002, Bamberg and Möser, 2007). Political and social engagement with these issues remains insufficient for effective change as these existential threats become increasingly pressing. This essay explores the disconnect between people, politics and the ecosystem services that sustain us, using climate change as a reoccurring example of an existential threat. It argues that this disconnect is primarily caused by a growth-focused economy that rewards purchasing behaviours over sustainable behaviours. It first discusses the markets that encourages an unsustainable culture of over-consumption. Following this, it demonstrates how this disengagement leads to the broader population not believing threats to be pressing. It then discusses how reframing these issues could increase engagement, by connecting existential threats to the personal and relatable issues that are priority concerns to the public, and the role policy can play in as part of a broader narrative shift.

Market institutions and consumer culture
To increase engagement with existential threats, there is a need for institutional change. In its current state, market institutions foster disincentives for sustainable behaviours and reward unsustainable ones (Fischer et al., 2012). In his book, Cribb (2017) states "It is the nature of the modern world that we are separated and insulated from the actual destruction by long industrial and commercial chains that blind us to the realities of mass consumption." (p. 25). Cribb demonstrates that consumers are effectively discouraged from thinking about their connectivity to and dependence on the natural environment. In developed regions such as Australia, consumers are separated from the actual impacts of consumption, fostering this disconnect (De Coverly et al., 2008). Consequently, the financial cost of consumption is not representative of the actual, external cost of consumption.

The focus on 'immediate' threats
As a consequence of this social disconnect, community engagement with environmental issues is decreasing despite the growing threat (Stoknes, 2015). One reason for this is that in Australia, existential environmental issues are not considered to be an immediate threat, which ultimately contributes to the problem. As Cribb (2017) states, "We have lost… the signal quality that set us apart from and above all other species in the Earth… the ability to wisely envision the future, understand it and take well-considered precautions against a bad outcome" (p. 11). Although the majority of Australian's consider climate change to be the primary concern when compared to other national risks (PRC, 2013), this same existential threat was ranked at 14/16 by Australian's asked to rank "general concerns" (p.5) in surveys conducted by CSIRO (Leviston et al., 2014). Respondents prioritised issues of health, the cost of living and employment as their

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top three concerns respectively (Leviston et al., 2014). This may indicate that although there is a widespread understanding of broad-scale risks, people do not identify with these existential issues as relevant or pressing in their everyday lives.

Linking existential threats to immediate threats

If 'health' is the priority concern for Australian's, it should be understood that all existential threats ultimately threaten human health. This is because threats including climate change ultimately affect the vital resources essential to maintaining good health, including air, water and food resources (WHO, 2008). Further threats include exposure to man-made chemicals that are unavoidable, as they persist within the food chain, water and soils (Loganathan and Lam, 2011). As a consequence, as Cribb (2017) states "…from conception unto death, we are exposed to thousands of substances, some deadly in even tiny doses and most of them unknown in their effects on our health and wellbeing or upon the natural world." (p. 104). In addition to those with unknown impacts are those with known impacts, such as household products and cosmetics associated with birth defects (Haraux et al., 2016) or some cancers (Harvey and Darbre, 2004). It is evident that the existential threats within Cribb's book are not separate to our most fundamental concerns, but central to them.

The role of policy makers

Reframing these issues as not just environmental issues, but as issues of public health that can be addressed and mitigated, could be valuable in increasing engagement with prevailing existential threats. Communicating this message is a challenge, and initiating practical action even more so (Kollmuss and Agyeman, 2002). Policy is used to regulate or influence behaviour (APSC, 2015), and is therefore central to addressing existential threats. I argue that to mitigate these threats, it is necessary to reframe the way in which policy is made by improving upon how progress is reported. GDP is commonly used as an key measure for progress, despite not adequately reflecting actual progress (Kubiszewski et al., 2013), and is deceptive as growth within a closed system (i.e. Earth) is limited (Meadows et al., 1972). As Cribb (2017) states, "…money… is, in theory, infinite. However, it is used to purchase, exhaust, pollute or destroy things which are finite—like soil, water, forests, fish, wildlife, certain minerals and energy sources, the Earth's climate." (p. 176). Instead, reporting progress using a measure that considers human wellbeing and vital ecosystem services could be a means of bringing existential threats to the forefront of policy making. The Genuine Progress Indicator (Kubiszewski et al., 2013), and The Australian Unity Wellbeing Index (Cummins et al., 2003) provide more comprehensive reports on progress, considering social, environmental and economic factors. Reframing progress this way may be means of increasing political engagement and action, and subsequently public engagement and action, with existential threats.

Conclusion

There is a growing disengagement between Australian's and the reality of increasingly dire existential threats, as we collectively continue to degrade vital resources. One reason for this is the way in which consumers are conditioned to disengage externalities and the reality of their impact. However, it is necessary to ensure Australian's understand that these existential threats are not distant but ever-present, affecting their everyday lives and contributing to their greatest personal concerns. To address this, these issues should be at the centre of national policy. For this to happen, it is fundamental we shift progress measures from a growth-focused narrative, to

one that values a more sustainable approach and challenges the systemic consumer-culture that perpetuates social disengagement with existential crises.

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Question 2) What will it take to put these threats at the centrepiece of national policy?
By Innie Anindita
Figure: *Cumulative steps to put existential threats at the centre of national policy*

1. Agenda Setting
Existential risks come to the attention of Governments.

5. Policy Evaluation
Existential Risk Taskforce will monitor and evaluate current policy and provide recommendations for improvement

2. Policy Formulation
Government formulate existential risk related policies allign with aspirations of citizens and political agenda

4. Policy Implementation
Government will change existing narrative of existential risk through amendment of Existential Risk Taskforce and subsequent legislative changes.

3. Decision Making
Governments adopt a 'course of action on existential risk related policy

The existing national policy agenda seems to focus on day-to-day affairs that appeal to the acting government and its citizens. Even then, such policies on these affairs operate on limited time frames, typically of about three to four years (Boyd and Wilson, 2016). Unfortunately, these time frames do not allow policy-makers to identify existential risks (Bostrom, 2009; Boyd and Wilson, 2016). These are risks that have the capacity to cause undesirable outcomes of future development, inevitably jeopardising the existence of the human race (Bostrom, 2002). Understandably, existential risks are sensitive and complex problems to be introduced in the political arena. A common solution is to ignore the risk in its entirety. Nevertheless, it will not eliminate the risk. Indeed, it is essential for policy-makers to develop a reactive approach that will allow society to quickly respond to impeding risks (Bostrom, 2009). Careful consideration of the policy cycle is required to produce successful existential risk based policy (Dovers and Hussey, 2013).

Problem Framing Existential Risks
As aforementioned, existential risks are distasteful, complex and sensitive problems that is neglected by policy-makers and members of society. This is because existential risks have been communicated in a pessimistic manner, evoking a sense of 'doom' and 'gloom'. To exacerbate, it has been expressed by Boyd and Wilson (2016) that unless the seriousness of these existential threats are understood, political institutions will not take cumulate action to avoid these threats.

Based on these circumstances, it is evident that there is a need to adopt a new narrative on existential risks. Policy-makers and advocates should develop a narrative that instils hope and opportunity, despite the unprecedented and disastrous conditions ahead. In turn, this will require policy-makers and advocates to urgently remind citizens that it is our intergenerational

duty to preserve our civilisation, allowing the survival of the human race. Nonetheless, community consultation is pivotal to ensure that newfound narratives address the public's fears, uncertainties and aspirations.

Political Framing and Implementation of Existential Risks

In some instances, government/international policies have given significant weight on achieving intergenerational equity amidst impeding existential threats (Farquhar et al., 2017). This can be illustrated from the Brundtland Report (1987), in which, widely accepted definitions of sustainable development requires signatory countries to develop in a manner that "meets the needs of the current generation, without compromising the ability of future generations to meet their own needs". Since the report was published, it has raised awareness around the necessity to place intergeneration equity in the face of economic development. Even more so, it created the foundations for dialogue and policy implications that are relevant today. The lesson that policy-makers can adhere from the Brundtland Report (1987) is the valuable nature of honesty and appeals to the common good. Existential risks will be accepted by all members of society if policy-makers take a constructive and objective look at the perceived risk, its consequences and how people can take cumulative steps to safeguard the future of society (Farquhar et al., 2017).

Monitoring and Evaluating Existential Risk Related Policy

Existential risks are complex and require urgent interdisciplinary attention. Establishing monitoring and evaluation procedures to examine impeding existential risks can create a new set of unforeseen problems if it is not implemented satisfactorily. This signals that 'trial and error' methods of risk alleviation are not enough to combat existential threats.

In hindsight, the reality is that predicting the likelihood of existential risks is a matter of degree, reliability and precision (Bostrom, 2009). Because of this, it may be a good idea for policy-makers to develop monitoring plans that are flexible and robust, encompassing a wide range of contingencies (Bostrom, 2009). This will allow the acting government to adopt an approach that is reactive to the changing circumstances of society. However, this is one part of the solution.

Indeed, there is a need to improve the accuracy of proposed or existing monitoring frameworks for existential risk related policy. Policy makers should not work in isolation on these mechanisms. Instead, it is encouraged for political actors to work interdisciplinary, enlisting the expertise of scientists, economists, engineers and historians. Perhaps, the establishment of existential risk taskforce is needed to successfully assess impeding unforeseen risks, develop adaptive risk-management and monitoring techniques that are appropriate to a countries political climate.

Conclusion

As illustrated, existential risks have received less scholarly and political attention than it truly deserves. Inevitably, this is because the acting government and its citizens are not willing to engage in issues that are pessimistic, sensitive and complex in its nature. Even more so, existing policy is unable to grapple with 'distant' circumstances affecting society. In order for existential risks to be widely accepted by the acting government, policy-makers and the general public, there is need to: consult communities on their fears, uncertainties and aspirations;

change the narrative of existential risks and threats; adopt policies that are reactive of current societal circumstances; implement evaluation and monitoring plans that are flexible and robust; lastly, establish a 'existential risk taskforce' that is responsible for community engagement, research, monitoring and evaluation and providing recommendations to the acting government in areas of risk management, sustainability and intergenerational equity. Based on these recommendations it is hoped that members of society will change their outlook on existential risks. Such changes are needed to ensure that society continues to thrive and develop amidst existential threats.

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Question 3) If Cribb is correct in his assertion that we need to produce 50% of our food in the cities and release large tracts of land for re-Wilding and return to nature, how could Canberra lead the way in Australia on this task?
By Alexander Cox

Julian Cribbs "Surviving the 21st Century" presents a holistic summary of the major existential threats facing human civilisation in the near future. Central to his thesis is the scale and manner in which industrial civilisation tries to meet human needs is fundamentally flawed. Indeed it has lead to ecological disasters such as biodiversity loss, climate change the cumulative impacts of these challenges threatens human welfare as a result of its ecological overreach. Consequently, it is only by transformative changes in how civilisation works that human needs may be met sustainably into the future. One of the most dysfunctional aspects of civilisation today is agriculture and the means by which we produce and distribute food. Modern agriculture is the cause of many environmental and social problems, notably climate change, land clearing (with consequent depletion of natural capital) and the increasing inequality that centralising food production has wrought, particularly on the populations of developing nations. Cribb additionally dedicates an entire chapter on the harmful effects of modern diets, high in sugar and simple carbohydrates are having on population health, as well as the openly toxic implications of the mass use of chemical fertilisers, herbicides and pesticides is having on our own health, but also natural ecosystems.

The implications of these challenges are significant. Food security is expected to decline in many places throughout the world, meaning that people will be forced into reliance on more regional food production. Cribb asserts that as much as 50% of food will have to be produced in cities, whose populations are expected to continue to grow throughout the 21st Century, in Australia and elsewhere. As one of the most urbanised nations on earth, urban food production ought to be a priority for Australian policymakers to reduce reliance on distributed supply lines and return significant tracts of land to nature, to capture the benefits of greater carbon sequestration, cleaner water catchments and biodiversity conservation. Given Canberra's abundance of open spaces, high socio-economic capacity and the population's awareness of environmental issues, it is uniquely placed to develop itself as a world leader in local food production.

Urban food production is a growing trend in many urban and peri-urban areas. At present, urban food production is mostly developed by local community organisations, associated with green politics and movement such as permaculture which support local networks formed around environmental and community interaction. Indeed one of the key benefits of urban agriculture has been the encouragement of community organizations formed around specifically local opportunities and challenges and the attendant social benefits of such networks. City farms and community market gardens are established institutions in many cities around Australia including Canberra. Prominent local food markets in Canberra include the Canberra farmers market (both Northside and Southside) and fresh food markets in Belconnen, Fyshwick and in many of the surrounding districts such as Murrumbateman. Such markets already provide a ready means to distribute local produce and demonstrate that the Canberra region can viably support a diverse range of local foodstuffs and value added goods. The principal challenge facing Canberra involves increasing local production and expanding the distribution channels of local producers

to create economically viable local food production businesses which are able to support local employment. Creating an economically viable local food industry is a necessity as until local food production can be developed to such an extent as to be self sustaining, it cannot develop past a niche industry largely characterized by amateur operations and will not sufficiently develop to the extent where local produce meets a significant proportion of the food consumed by Australian Capital Territorians.

Some of the most important measures which would encourage the development of a vibrant local industry include:

1. The creation of a regional local food strategy for Canberra and region. Such a strategy should include an audit of Canberra and regions existing food consumption trends and assess the risks to regional food security faced by the ACT. This report should be made publicly available and detail the goals of the ACT Government with respect to local food production and assess key limitations facing local producers, for example, the lack of a certified organic abattoir limits the ability for producers to produce a range of meat products locally. Instead, livestock must be shipped to processing facilities in NSW and then finished meat products shipped back, increasing the carbon intensity of the food system.

2. The revision of planning goals and zoning regulation of the Australian Capital Territory to limit the amount of peri-urban land currently on the urban fringe of Canberra to future subdivision development. Existing zoning restrictions on the use of urban land for light agricultural pursuits such as the planting of orchards and vegetable gardens should be relaxed.

3. The identifying of suitable sites of green areas to release to local community groups seeking land to develop local food production enterprises. A database of such areas should be maintained by the ACT Government, which should additionally record and monitor local production levels and community participation in these areas. Land could be rented on a tender basis to producers as well as granted to registered community gardening groups and co-operatives.

4. The revision of the school curriculum within the Australian Capital Territory to include specific modules on food production and related issues such as food security. Given agriculture is the largest impacting human activity on Earth's natural systems and the central role nutrition plays in healthy living, this is a significant oversight in the existing education system which should be redressed. Children should be taught about agricultural systems of production and the importance of nutritionally dense, locally produced food ought to be emphasized. The ability for schools to partner with community gardens and local producers should be explored where possible. This would directly expose children to farm processes and food production while potentially providing opportunities for producers to gain access to free labour and a platform to integrate their products to their direct community.

5. The creation of a city wide composting strategy to collect and recycle all green and putrescible waste produced in the ACT. Finished compost should be sold back to local producers, with the goal to achieve as close to a "closed loop" urban food production system.

Increasing local food production offers many benefits many benefits for the Australian Capital Territory. These range beyond environmental benefits but additionally promise benefits for local health, community participation and employment through the creation of a vibrant local industry. Encouraging radical changes in the food system is not a choice we have as a society, it is necessary given the unsustainability and increasing detrimental impacts of the industrial food system. While Cribb's goal to produce 50% of food within cities is ambitious, Canberra is uniquely placed to pursue a vigorous expansion in local food production and should embrace the opportunities to create positive change in our region.

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Question 4) How could a national *Comission on Global Futures* assist in the desired transformative change to a sustainable future for Australia? What lessons can be learned from the now defunct Australian Comission for the Future?
By Caitlin Buckler-Jones

Our current mode of short-term profit-oriented thinking is simply unsustainable. Present-day assumptions regarding economic and social systems as well as environmental values must shift to a new paradigm, focused on sustainability and equity. In order to address and transform the existing attitudes and frameworks, we must approach problems in new and innovative ways. The essay explores the merit of a proposed Commission on Global Futures (CGF) to help 'develop a positive vision for the future of the nation, the planet and all its living systems'.

Background information
Globally, we are headed towards ecological collapse. Threats face us from all angles, from food and water security to social inequalities, the majority arising from our rapidly changing global climate. The current social paradigm of both Australian society, and the world at large, place greatest value on progress and growth, with election cycles and quarterly business performance set as key measures of societal success (OECD, 2017). Such short-term profit-oriented thinking is simply unsustainable. Future thinking and education are central to informing the transformative societal change required. Present-day assumptions regarding economic and social systems as well as environmental values must shift to a new paradigm, focused on sustainability, equity and forward-thinking. The problems of complex and inter-related systems (both ecological and societal) can no longer be considered in isolation, rather, must be studied in a multidisciplinary, multi-scaled and dynamic nature (Hewson et al., 2017).

In order to address and transform the existing attitudes and frameworks, we must approach problems in new and innovative ways in order to make future issues a political focus. A proposed *Commission on Global Futures* (CGF) will help to '*develop a positive vision for the future of the nation, the planet and all its living systems*' (Hewson et al., 2017). Forward thinking institutions are required to engage with these 'wicked' topics at both the local and international scale, in order to provide a whole picture perspective. However, performance of commissions is not simply dependent on the issue at hand, but on the knowledge base they draw from, methodology and governance (Banks, 2012). It is important when considering the potential role of a CGF that we reflect upon the success of similar national institutions and consider the failings and opportunities that we have learnt as a nation.

Aims of the proposed Comission on Global Futures
The proposed CGF will be a national agency, semi-independent of government, representing multidisciplinary thinking and interaction between government, experts and civil society in order to develop forward-thinking strategies. This non-partisan institution aims to be both advisory and educational in order to:
- ʃ Challenge the predominant mindset of linking progress to economic growth
- ʃ Operate at arms length from government
- ʃ To make firm recommendations for the way forward
- ʃ Both advisory and educational for politicians and the national community
- ʃ Explore and present solutions

However, are the overarching goals of such a commission too lofty? How do they compare to the aspirations and achievements of similar organisations? It is important here that we analyse the demise and successes of similar national organisations to create a commission that is both informative, prescriptive and successful.

Lessons from the Australian *Commission for the Future* and *Productivity Commission*
Established in 1985, the Australian Commission for the Future (ACF) focused on issues of sustainability, technological law and advancement, educataion futures, foreign affairs, biotechnology, environmental health and the global climate. Decreasing budgets and wide criticisms lead to the ultimate demise of ACF in 1998. Richard Slaughter (1999), a former consultant for the Commision determined several shortcomings that contributred to the dissolution of the ACF and proposed them as lessons for future institutions of foresight:

- Intentional definition of the core purposes and institutional functions
- Establishing secure and diversified funding, keeping in mind intial goals of independence
- The experiences of past and global future-thinking institutions must be considered and applied from day 1, reducing the learning curve of the organisation
- Focus on informational integrity: '*Second rate futures work is worse than none at all because it provides spurious grounds for the dismissal of the whole enterprise'* (Slaughter, 1999)
- Potential employees/consultants should be only be considered on the basis of interdisciplinary knowledge, with extensive experience in future thinking. All employees should be inducted into the interdisciplinary mindset as a condition of employment
- Empirical, ethical and empirical methods are required to ensure full-bodied critique and analysis
- Integration of similar institutions, both globally and locally, will help to inform, create a shared voice, pool resources for common ventures, engage all relevant voices, publications & organisations, in order to support global research and participation.

The PC has been seen as an objective success in terms of advisory bodies in the Australian poilitcal climate, providing impartial and measured advice to bring about political learning and change and to educate the Australian public. Running for almost four decades, the commission has provided independent advice and information to the Australian Government, objectively exercising judgement based on facts and analysis, without influence from special interests (Banks, 2012). The lessons determined previosuly by Slaughter (1999) are integral to the successful implementation of a successful Australian Commission for the future.

Final Comments
Given the interwoven and complex nature of politics (melding special interests with public good), it is imperative that independent bodies, such as the Productivity Commission are able to operate, to confer advice to governments and to bridge gaps in public knowledge.

The proposed Commission on Global Futures must seek to provide the general public with an insightful need to prepare for future challenges as both a global, national and local level. Responsiveness to client needs and the involvement of all relevant participants will ensure the

legitimisation of the work of the Commission. The creation of such a future-oriented organistatiion is imperitive to the continuation of human society. The time for procrastinating on such an urgent issue has passed. To ensure the health of the planet and human society, interdisciplinarity, foresight, knowledge and immediate implentation are a functional neccesity. Action is required now.

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Question 5) Is the international body "Future Earth" a body fit for the purpose of generating essential global change in time? If not, what will it take?
By: Andrew Luke

Existential risk continues to dominate our 'business as usual' approach to global affluence. Because of this, we are likely to become extinct as the largest threat to our survival is ourselves. This is not the same as a meteor striking the planet, or a super volcano erupting. This is something that is, by literal definition, man-made, and can be changed by humanity for the better. Returning to the way things were is no longer possible, both technologically and societally. It is the instilling of global change that has wrought these problems, and global change will have to fix it. To form a transformative approach that deters our lust for affluence and creates fair and justified rules by which society can abide by is a requirement, and also a miracle. With the global scale that the world operates on, attempting to create change requires a global movement.

Future Earth is an international body who have taken the reigns to attempt this monumental task. They have been operational for over two years, first launched in 2015 after being announced in 2012, and act as the successor to previous giants in earth system science such as the International Geosphere-Biosphere Programme (IGBP). They host interdisciplinary research programmes including areas in natural and social sciences, engineering, law, and humanities, all working to promote research into sustainable development (AAS, 2017). Future Earth provides a mission statement, "build and connect global knowledge to intensify the impact of research and find new ways to accelerate sustainable development". (Rockstrom, 2016)
A simplification would refer to Future Earth as a network which connects organisations and projects who are working towards similar global sustainability goals. They have a 10-year initiative that has the intention to "advance global sustainability science, build capacity in this rapidly expanding area of research and provide an international research agenda to guide natural and social scientists working around the world". They intend to address multiple challenges concerning global sustainability, all in time for 2025. Professor Stewart Lockie, the director of the Cairns Institute, brings up the role that Future Earth truly plays in achieving that initiative. The primary weapon that Future Earth can deploy is in facilitating global collaboration. Shaping what is and is not a priority for national research begins to focus the minds of researchers onto what truly matters, and perhaps most importantly, motivates them. (Future Earth, 2017)

Using motivation as a primary weapon to fight back existential crises is surprisingly efficient. As discussed, the risks to global sustainability are all man-made, and are hence must be transformed to something sustainable through the efforts of humans. Giving people direction, convincing them that it is indeed worth the time and effort is a powerful driving force to overcoming the risks that face us. Substantial amounts of research already within the area, but drawing in together and giving thought to the communication of these issues is what Future Earth excels at. It's expanding their network further and further, on a global scale. (Cork & Finnigan, 2016)

IGBP had achieved incredible feats in the past, creating foundations for the now-established field of Earth system science, of which Future Earth intends to encompass and expand upon. To say that Future Earth's task is ambitious is an understatement. To bring together their interdisciplinary fields of natural and social science, combining to engage in research that for once involves governments and other policy makers, may have an incredible impact on the way the world views sustainability. It could instil the global change we need to avoid the catastrophic consequences of our actions. The problem is if it will have the political weight required, and if it will be soon enough.

Global change is referring to any planetary-scale change of the earth system, which includes changes in the land, oceans, and other major parts of the ecosystem. However, due to human influence on these aspects, human society is now included in this system. This means that other global sectors of human society are included, such as transportation, land use, or globalisation. In this case, the goal of essential global change that Future Earth seeks to accomplish relates to planetary management. The IGBP before them recognised in 2004 that "An overall, comprehensive, internally consistent strategy for stewardship of the Earth system is required". (Steffen et al, 2004)

Future Earth, being primarily a research body, talks highly of their international leverage but the individual projects stemming from it all seem to be far more concerned with their own work. They are like a bank, where individuals must put money in before they are allowed to take money out, and this tactic is being abused by those that wish to accomplish their own goals. Their goals are still related to creating global change, but with so many different approaches, the logistics of creating a comprehensive and internally consistent strategy begins to fall apart.
As an addition, Future Earth has no major accomplishments to their name like IGBP did. Their leverage in the political world is limited to minor recommendations, and cannot influence national policies to an extent that could generate global change within 10 years. Future Earth would additionally struggle to find that weight in the 10 years they have given themselves. What Future Earth can do is use their research body to make ground-breaking discoveries or relevant scientific findings in the way of global change, anduse that weight to swing political factors in their favour. The real issue to their plan is believing they can do so much in a short amount of time, but this may even work to their advantage.

While a 10-year initiative will make people sceptical, it will also make them concerned, and perhaps hopeful. People working within Future Earth may not meet the deadlines but will have put in far more work in trying to meet it than what would have been done with a more relaxed schedule. The urgency they give the situation is justified, and that adds to their weight and will continue to once more existential issues begin to concern the average citizen.

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