WEALTH CREATION AND THE STEWARDSHIP OF CREATION

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Global Consultation on Wealth Creation for Transformation

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A paper from the Global Consultation on
Wealth Creation for Transformation
organized by the Lausanne Movement and BAM Global
in Chiang Mai, Thailand, in March 2017.

Global Consultation on Wealth Creation for Transformation Series:

- Wealth Creation and the Poor
- Role of the Church in Wealth Creation
- Wealth Creation: Biblical Views and Perspectives
- Wealth Creation and the Stewardship of Creation
- Wealth Creation within Global Cultural Perspectives
- Wealth Creators' Contribution to Holistic Transformation
- Wealth Creation and Justice

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Foreword

'Remember the LORD your God, for it is he who gives you the ability to produce wealth' (Deut 8:18).

The Bible talks about wealth in three ways; one is bad and two are good. *Hoarding* of wealth is condemned. *Sharing* of wealth is encouraged. *Creation* of wealth is both a godly gift and a command, and there is no wealth to be shared unless it has first been created. But all too often the issue of wealth creation is misunderstood, neglected, or even rejected. The same thing applies to wealth creators.

The Global Consultation on ***The Role of Wealth Creation for Holistic Transformation*** aimed at addressing that. We were about 30 people from 20 nations, primarily from the business world, and also from church, missions and academia. During the Consultation process 2016 – 2017 we discussed various aspects of wealth creation, including justice, poverty, biblical foundations, culture, wealth creators, stewardship of creation and the role of the church. The findings have been summarized in the *Wealth Creation Manifesto*, and will also be published in several *reports* and a *book*, as well as an educational *video*.

All these contain a *wealth of knowledge* and insights, based on the Scriptures, rooted in history and informed by present-day conversations and examples.

Gold in the ground has no particular value until it is discovered, extracted, and traded. Using the metaphor of mining let me mention three 'goldmines' that we have sought to dig into during our Consultation process.

The biblical goldmine

From the Manifesto: *'Wealth creation is rooted in God the Creator, who created a world that flourishes with abundance and diversity. We are created in God's image, to co-create with him and for him, to create products and services for the common good. Wealth creation is a holy calling, and a God-given gift, which is commended in the Bible.'* There is a lot more gold to be found in the *biblical goldmine*.

The historical goldmine

Wealth creation leading to transformation is not new. From the Manifesto: *'Wealth creation through business has proven power to lift people and nations out of poverty.'* There are many stories of holistic transformation through wealth creation throughout history, and some are still untold. Wealth creation has a history and we need to explore it further. Through our reports you can dig into *historical gold* mines.

The global goldmine

Wealth creation is not a Western or rich-world phenomenon. Many men and women are making a difference through businesses on all continents. From the Manifesto: *'Wealth creators should be affirmed by the Church, and equipped and deployed to serve in the marketplace among all peoples and nations.'* We need to learn from them and others and to extract the *global gold,* also found in these reports.

Discover and extract the intellectual wealth in the Manifesto, the reports and books as well as the video, and let them add value to your life and work. Share with others.

Please start by reading the *Wealth Creation Manifesto*. It will give you a context and a framework to better understand each report. Please also see the appendix *Consultation on Wealth Creation: Background and Context*.

Mats Tunehag
Chairman of the Convening Team

Lausanne Movement

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Wealth Creation Manifesto

Background

The Lausanne Movement and BAM Global organized a Global Consultation on ***The Role of Wealth Creation for Holistic Transformation***, in Chiang Mai, Thailand, in March 2017. About 30 people from 20 nations participated, primarily from the business world, and also from church, missions and academia. The findings will be published in several papers and a book, as well as an educational video. This Manifesto conveys the essentials of our deliberations before and during the Consultation.

Affirmations

1. Wealth creation is rooted in God the Creator, who created a world that flourishes with abundance and diversity.
2. We are created in God's image, to co-create with him and for him, to create products and services for the common good.
3. Wealth creation is a holy calling, and a God-given gift, which is commended in the Bible.
4. Wealth creators should be affirmed by the Church, and equipped and deployed to serve in the marketplace among all peoples and nations.
5. Wealth hoarding is wrong, and wealth sharing should be encouraged, but there is no wealth to be shared unless it has been created.
6. There is a universal call to generosity, and contentment is a virtue, but material simplicity is a personal choice, and involuntary poverty should be alleviated.
7. The purpose of wealth creation through business goes beyond giving generously, although that is to be commended; good business has intrinsic value as a means of material provision and can be an agent of positive transformation in society.
8. Business has a special capacity to create financial wealth, but also has the potential to create different kinds of wealth for many stakeholders, including social, intellectual, physical and spiritual wealth.
9. Wealth creation through business has proven power to lift people and nations out of poverty.
10. Wealth creation must always be pursued with justice and a concern for the poor, and should be sensitive to each unique cultural context.

11. Creation care is not optional. Stewardship of creation and business solutions to environmental challenges should be an integral part of wealth creation through business.

Appeal

We present these affirmations to the Church worldwide, and especially to leaders in business, church, government, and academia.[1]

- We call the church to embrace wealth creation as central to our mission of holistic transformation of peoples and societies.
- We call for fresh, ongoing efforts to equip and launch wealth creators to that very end.
- We call wealth creators to perseverance, diligently using their God-given gifts to serve God and people.

***Ad maiorem Dei gloriam*—For the greater glory of God**

Executive Summary: Wealth Creation and Stewardship of Creation

The care of creation is one with wealth creation, and wealth creation is key in stewarding creation. First, intentionally stewarding their businesses following the creation mandate, wealth creators witness Christ's love for his creation to others, and presages creation's full restoration. Second, wealth creators can apply their innovation and ingenuity to meet the environmental challenges we face.

Wealth creators realize environmental stewardship is a spiritual exercise. It is a reconversion to conservation. It is a spiritual battle against the forces of greed and selfishness with weapons of grace through the creation of wealth for the common good. Seeing creation as good, realizing creation is not ours to own but to steward, realizing we have been commanded to work the ground and prosper from its fruits, gives us the perspective of love as we use all the talents God has given.

The basic biblical premise for man's interaction with creation and creation with dignified work is clear. In the beginning, God worked to make his creation.[2] We acknowledge him as Creator. His creative work gave us the resources 'to work it and keep it' (Gen 1:15). We are stewards. It had been given to us as a good gift to use and care for.

A creation steward sees business as a web of relationships, not a linear progression. The premise of this web comes from an ecological understanding of everything being related to everything else.

This paper is a call to action. It is a call to action for Christians to lead the charge in creation care, to bring back hope to the debate of environmental stewardship. It is a call to collaborate with all people of goodwill to take care of our common home. It is a call to organize scientists and wealth creators to work together to provide solutions for environmental problems. It is a call to provide practical guidelines to help wealth creators to run their businesses and personal life as environmental stewards.

Wealth Creation and Stewardship of Creation: Themes and Issues

Mark Polet and Francis Tsui[3]

1.0 Introduction

Wealth creation starts with the rich provision that God has given. The creation of wealth cannot take place at the expense of the environment. Indeed, as wealth creators we are commanded to be fruitful (Gen 1:28)[4], not to exploit. We all depend on creation. We are stewards of it as we engage in the value-adding processes of innovation, business, and wealth creation while minimizing damage to the environment. Indeed, our challenge and command is to restore it. This chapter examines *two key areas.*

- Creation care is not optional. Environmental stewardship is a godly command and an integral part of wealth creation through business.
- Wealth creators are called to use their skills, creativity, and resources to address some of the world's environmental and sustainability challenges, and to participate in God's restoration of creation.

This paper is divided into three sections: a brief discussion of the biblical basis of creation care as it relates to work and wealth creation (Section 3); a call for intentional stewardship within all businesses, (Section 4); and a call for innovation for wealth creators to see where their unique gifts can meet environmental needs and achieve sustainable development (Section 5).

2.0 A brief review of the biblical basis of creation care

The basic biblical premise for man's interaction with creation and creation with dignified work is clear. In the beginning, God worked to make his creation.[5] We acknowledge him as Creator. His creative work gave us the resources 'to work it and keep it' (Gen 1:15). That we are stewards, not owners, is clearly established in the creation mandate in Genesis 1:28, where we receive both blessings and commands to be fruitful stewards. Creation is not ours, it is God's. It had been given to us as a good gift to use and care for. It is ours for a season, even when managed as private property. With property or resource rights comes the responsibility of primary steward of that resource.

Our biblical basis sets us apart from others who are concerned about the environment.

- We worship the Creator, not the created. We stand against pantheism and earth-worship, knowing we work in God's garden.
- We see environmental stewardship as a spiritual battle. While the world has been made corrupt through sin, it has been restored through Christ.
- We are responsible for the generations following. We do not believe in nihilism or existentialism; we believe in the eternal providence of God.

- We live here to be a solution and to encourage people to accept salvation.
- We are not fear mongers; we are fearless and courageous (Josh 1:9). As wealth creators, we rely on data to make our Kingdom business decisions.
- We embody the person of Christ in the way we go about our work and service of creation care. We go beyond words and act, but always as an ambassador of Christ.
- In the creation care community, there is room for the prophet, who points out the environmental challenges and opportunities we face; the priest, who gives us the theological basis for our actions, always bringing us back to the creation mandate and the restored creation through Jesus; and the king, the wealth creator and others who act to execute the mandate.

God is seen through his Book of Creation (Rom 1:20). To mar that book is to take away its value to show God to the world. Creation itself groans as it is set free from the bondage of corruption into redemption along with us (Rom 8:20-22), until its final restoration (Rev 22:1-5). Corruption is in part manifested by the pollution caused by man's activities.

When we walked with God in the garden, we had everything. Work was worship. Placed in the garden to work and be his stewards, care of the environment is as old as creation itself. Caring for creation through our businesses should be as natural as breathing.

2.1 Confession

When sin entered, poverty entered. The greatest sin for a wealth creator is poverty of thought. That poverty causes the wealth creator to focus only on the financial results, at the expense of people and the planet. We tire the soil, strip the land, sully the land and water, all in the name of profit, rather than running our business in the name of our Father. Environmental degradation starts with pollution of the mind. As Wendell Berry says,

> Our destruction of nature is not just bad stewardship, or stupid economics, or a betrayal of family responsibility; it is the most horrid blasphemy. It is flinging God's gift into (h)is face, as if there is no worth to them beyond that assigned to them by our destruction of them.[6]

We confess our sin and weakness of thought and grasp the saving restorative grace of forgiveness through Jesus Christ (Rom 8).

2.2 Redemption

As a redeemed people, we look forward to a restored creation and the elimination of poverty, to an abundant life, (John 10:10). A fair distribution of wealth includes a fair distribution of environmental resources. We are a people of hope, and determined to express that hope in a recommitment to proper stewardship. We celebrate the provision God has given; he has given us the increase, the ability and the resources to create wealth (1 Cor 3:6-7). We give him all the glory and worship through our work. Our work towards a restored creation now presages the new heaven and new earth, (Rev 22:1-5).

2.3 Outreach

We rage at the acts of man in corrupting the air, water and land. We are determined to restore God's good earth.

We are open to work with men and women of peace of all faiths to restore the environment and celebrate God's abundant provision. In so doing, we must remember we often start from a very different place than others concerned for the environment. We honor the Creator; we take joy in creation. We do not worship the created.

E. O. Wilson, a very well respected secular scientist, is an example of those who are reaching back to us. In an interview on his book, *The Creation*[7], he says, 'Secular-based science . . . extend(s) the hand of friendship (to religious believers) and to say, may we forget for a while our metaphysical differences and the culture war, put them aside, and meet on this common ground of saving the creation.'[8] Pope Francis responds, 'Now, faced as we are with global environmental deterioration, I wish to address every person living on this planet.'[9]

We follow God's personality through earth keeping and cultivating. Caring for the environment also allows for an opening to share the gospel of those who care for the planet.

3.0 Intentional stewardship

Along with the spiritual, financial, and social bottom line, the environmental bottom line is an integral measure of a God-centered successful business. The subject of this series is wealth creation for holistic transformation. The work of wealth creators includes sharing the Good News of salvation through Jesus, improving the financial wellbeing of society and the staff within their companies, providing the dignity of work and the stability that ensues from meaningful long term employment, developing a society where we love each other as we love ourselves, and providing the clean energy, water, air and land on which we live. The wealth creator acknowledges this inextricably linked web of relationship with Christ, society and creation.

Environmental stewardship, then, is not an add-on. It is not part of a marketing plan to 'look good'. It is a God-given command to steward his creation. By affirming one's business and passion for wealth creation as an important part of the business ecology and an instrument in meeting the cultural mandate, creation will be restored and opportunities for wealth creation will be seen. Each business run by wealth creators has a specialty, a God-gift, and points of excellence that can be applied to a pressing environmental issue. A transportation company can work on innovative fuel efficiency and improve transportation of needed medicines. A restaurant can source its food stocks with care,[10] and reduce food waste by supporting the food bank with excess, then composting the rest. An office can install passive cooling, energy efficient lighting and provide incentives to reduce commuting or increase the use of less polluting transport for their employees. Companies have the advantage of scale and resources to do much good quickly. Environmental discipline is financial discipline (conservation of resources), social discipline (respect of local communities and the resources under their stewardship), and spiritual discipline (obeying God's commandment to steward the earth). The bottom lines are integral and are split into four for convenience, but not in practice. A company is not truly profitable until it affects a positive return in each bottom line. Stewardship is intentional and requires discipline to carry it out. Sustainable living is to 'aim for a full, just and responsible enjoyment of the amazing gifts that our generous God has provided for us.'[11]

3.1 Every business is an environmental business

Since environmental discipline is integral in any business committed to run with excellence, every business is an environmental business. The application of the interconnected strategies of pollution prevention, product stewardship and sustainable development is essential.[12] All businesses affect the environment from where they extract their resources and where they deposit the materials (and waste) they produce. The work of one environmental consultant alone served 23 industry sectors in helping them meet their environmental requirements.[13] This work found the integration of environmental discipline and financial discipline was an almost one-to-one correlation. If the site was a mess, the accounting was a mess. Wealth creators, whatever their business is, act as creation stewards to restore creation because it is God's command, not just to fulfill regulatory obligations or for public relations.

3.2 How to choose and what are we measuring against

As stewards, we have been given a great deal of autonomy to decide what would be the most appropriate course in deciding what is best for the business in its environment. The challenge of meeting all four bottom lines is considerable. While BAM Global's Creation Care Consultation Team will be digging deeper into decision trees, developing metrics and tools to assist the BAM business, some principles can be discussed here.

3.2.1 Regulatory compliance
Wealth creators comply with the regulations. Sadly, in some jurisdictions, this puts them at a short-term disadvantage against their competitors. The issue is not the regulations themselves; rather, it is the need for equal application and fair enforcement. If regulations are inconsistently enforced, a less upstanding competitor may realize short-term profits compared to a wealth creator's compliant enterprise. However, we are called to, as much as possible, live at peace with all men (Rom 12:8). Romans 13:1-3 and 1 Peter 2:13-17 continues with guidance on how to respect authorities. Wealth creators lead the way.

3.2.2 A good steward under different economic systems
This chapter does not opine on what economic system is most biblical. Broadly speaking, the access to resources in today's world is organized through a combination of private property rights, state control, or management of the commons. The authors have witnessed sites in North America whose private owners show no regard for their leaking underground gasoline tanks contaminating their site and their neighbours' property. We have seen overgrazed

pasturelands in central Asia where neighbours have overexploited the common land, causing erosion and loss of productivity. We have choked on air fouled with particulate matter in countries run by the state. We have also seen private companies working on public lands restoring mines into productive, ecologically stable, lakes. We have witnessed the state restore rivers to health in Europe. We have seen not-for-profit organizations and private corporations combine to provide innovative composting solutions. 'What one can observe in the world, however, is that neither the state nor the market is uniformly successful in enabling individuals to sustain long-term, productive use of natural resource systems.'[14] Whether the wealth creator has private property under their stewardship or uses resources managed as commons, they must be 'salt and light' in managing such gifts, carefully managing the garden of resources for which they have been given authority to manage, to the glory of God and the benefit of humanity.

3.2.3 No two for one deals

One does not develop one resource and in the process destroy two others. If one must remove a stream and forested land to extract gravel, after the gravel is used, one restores the land to its equivalent productivity. The word 'equivalent' rather than 'original' is used intentionally. Rebuilding an ecosystem to its original capability is difficult: changes in soil and hydrological characteristics alone caused by resource extraction make it very challenging to re-establish the previous ecosystem. However, putting the land back to where existing species can flourish is a well-developed art.

3.2.4 Jubilee and joy

It is not all drudgery being a creation steward. We take joy in the garden. Just as we glory in relationships, especially when we witness God bringing someone to himself, just as we like a profitable bottom line, we can take joy in creation, whether it is marveling at a remarkable vista, or greening your business premises with flora.

3.2.5 Risk, probability vs. consequence

'We do not live in a riskless universe . . . . The real challenge in the environmental situation is to think through which risks to afford and what risks are not permissible and where to draw the line.'[15] Now that the wealth creator approaches his own business and new opportunities with an understanding of all bottom lines, risk management tools that help balance responses based on probability (the chance of something happening) and consequence (the severity of the event) will help lead the wealth creator to the appropriate decision. Some tools are introduced in the Self Directed Audit section.

3.2.6 Value and residual impacts

In more complex projects, valued ecosystem components are identified as part of the business planning cycle. Such components, whether social, structural, or environmental are an elegant way of walking through one's planning cycle and understanding the business environment in which the wealth creator is determined to look.

3.2.7 The thin red line

Decisions in environmental stewardship are often as complex as the ecology those decisions are trying to protect. However, there is one instance where a line should not be crossed, and that is when genetic diversity would be lost, either in the loss of a species or the loss if a unique ecosystem. Once that genetic material is gone, it is gone forever. It is like ripping a book out of the page of God's Book of Creation, never to be read again. As is discussed elsewhere, 'Every extinction is a loss of potential solution.'[16]

3.3 An ecological basis to business

What does the work of a creation steward look like? A creation steward sees business as a web of relationships, not a linear progression. The premise of this web comes from an ecological understanding of everything being related to everything else. To take this parallel further, 'the environment of an animal', for instance, 'consists of everything that might influence its chance to survive and reproduce.[17]' The same premise applies to a business in terms of its ability to survive and reproduce. This approach in business breaks open two opportunities.

3.3.1 Filling in the niche

In an ecosystem, bare areas or a missing aspect of a food chain are filled in by an organism that takes advantage of the gap. If there is bare earth, eventually a seed from a plant adapted to disruption will fall there and grow. The same in business. By taking an ecological approach to market analysis, a businessperson can see a gap in the economic web of his market, and fill it. They can also see where weeds fill in where the good seed should be. In the web of things, if good seeds are not sewn, bad weeds will fill in any gaps (Matt 13:24-30). The bad seeds, for example, deforestation, the sex trade, unsustainable consumption, and illegal resource extraction, are evident. Businesspersons of faith can help weed out these bad seeds. Deforestation can be halted by providing alternative sources of fuel and innovative agriculture practices. The temptation to enter the sex trade can be reduced by providing dignified work alternatives to the participants.

Illegal resource extraction can be replaced with thoughtful, planned initiatives that honor the Creator of the resources in the first place. 'Bare areas' are more difficult to see, but examples include the lack of available electricity and the lack of internet. Countries are looking for innovative ways to connect their peoples. Canada, for instance has set a universal broadband goal of 50Mbs and unlimited data.[18] Building and restoring a distributed energy loci and robust energy grid is a worldwide opportunity. Opportunities exist in these and many other areas for wealth creators to create value while providing services that have an implicit social good. 'In the dynamic processes of life, the overall trend has been towards increasing diversity and complexity,'[19] Wealth creators are admirably suited to see the subtle niches that are available where they can add value.

3.3.2 Web of relationship

The ecological approach also acknowledges webs of relationship. A business influences and is influenced by a centrum of directly acting components within a web of indirectly acting components in an almost infinite branching chain.[20] By honoring all those that do business with one, whether in the supply chain or peripheral to it, one can seize the opportunity for discipleship and spreading the Light. In ecology, every living thing relies on everything else. The same goes in business. Businesspersons of faith acknowledge that every client, every worker, every supplier, even every competitor or bureaucrat is a precious and beloved creation of God. We are commanded to love our neighbor (Luke 10:27), indeed to love our enemy (Matt 5:43-45). The wealth created is the wealth of relationship. In addition, a wealth creator's purchasing power can be a force of discipline and good in raising the quality of his supply chain. Where possible, purchasing from men and women of peace, who strive for good workplace practices, reduced corruption, and environmental integrity reward those who they themselves strive to be good stewards.

These same businesspersons acknowledge that creation is good (Gen 1:10ff) and belongs to the Lord (Ps 24:1). In God's hand is the life of every creature and the breath of all mankind (Job 12:10). The garden that is the Earth needs to be worked and cared for carefully. When good stewards consider the work of God's hands, they are filled with awe at the wonder and bounty of God's creation (Ps 8:3). In contrast, those who forget these wondrous works (Ps 106:7) bring grief at the despoliation of God's creation.

Natural ecosystems are tough places, whether made so by the consequences of sin,[21] or strong selection and environmental pressures. Business ecology is difficult as well. There are many 'weeds' of corruption and unfair competition working to invade the garden of the wealth creator's business. The wealth creator must work diligently to tend their garden, remove the weeds, be strong and courageous (Josh 1:9), and diligent. The wealth creator must stand against such practices, while loving their enemy.

Tim Weinhold takes the garden metaphor further. Beyond the weeds of corruption and unfair competition, there is the need to tend and sustain the garden with effort, continuous investment and renewal.[22]

3.4 Circular supply chain

One of the greatest negative impacts of business on ecosystems stems from a linear approach to the supply chain. A linear approach implies that some costs are externalized. Natural resources are considered free; waste products are deposited without concern for the receiving environment. But there are no externalities. Using the resources in the supply chain with care and an acknowledging that everything comes from the Father and returns to him is paramount.

A linear approach leads one to focus on the tree rather than the forest. We acknowledge the complex relationships of business systems and ecosystems and work within that framework.

As part of the stewardship mandate, we cannot assume the water, land, air, and biological resources we use are free. They are not. None of these resources are limitless, and their careful use is a sign of business excellence. We can also not dump waste and toxins on the land, in the air, or in the water because it is not our land, water, and air to compromise.

Contaminating the water a business may need to reuse does not make any business sense. Wealth creators do not waste wealth, they steward these resources carefully. They do not see waste; they see a product for which they need to find a market.

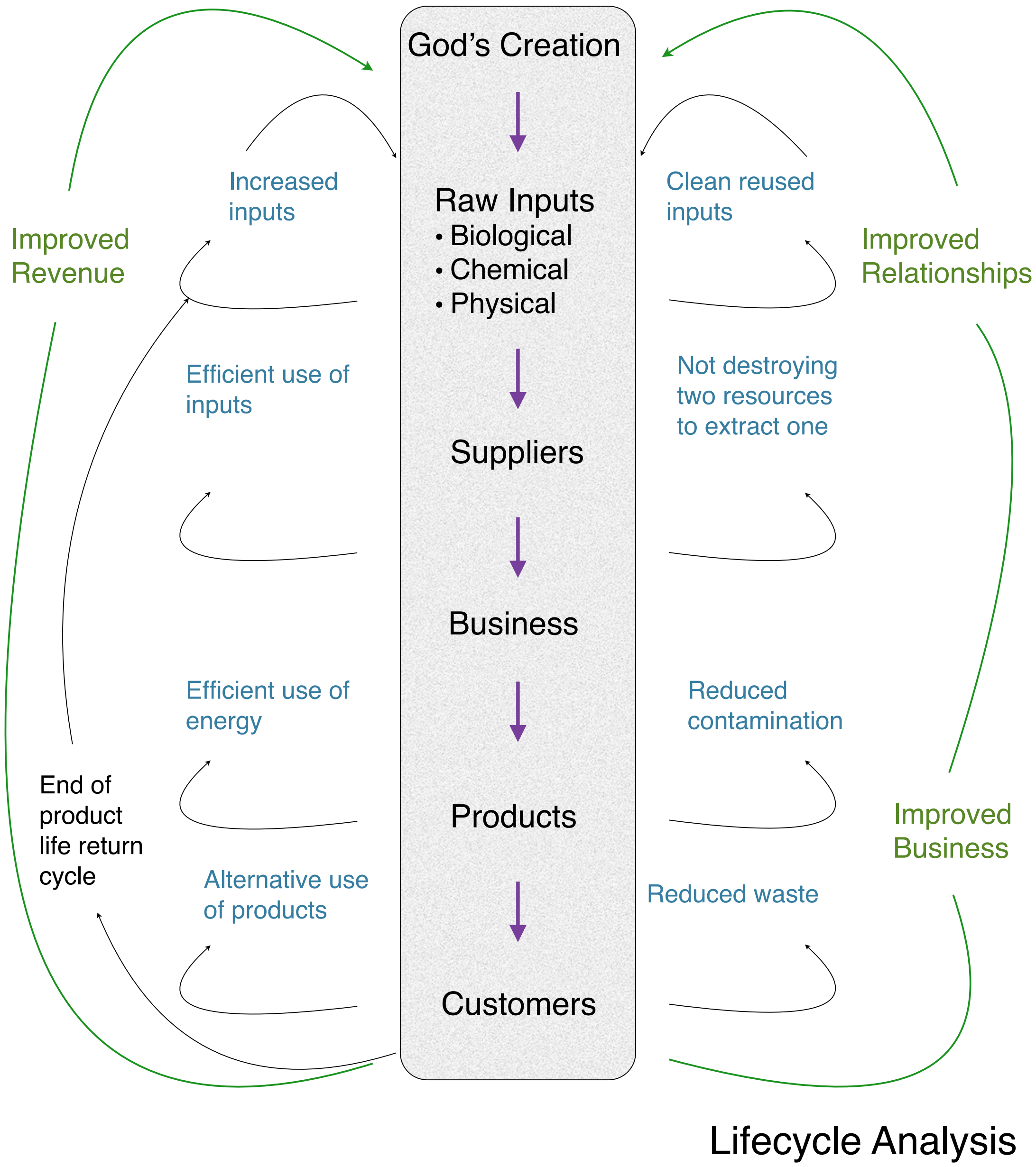
Taking care of the people in one's supply chain is a high form of discipleship. Because everyone in the supply chain is a precious creation of God, the wealth creator's treatment of them as such is a natural extension of his or her faith. We do not possessively control production or consumption; we partner and collaborate.

Another advantage to seeing the business setting as a circular supply chain is to see new business opportunities along the chain, providing an opportunity for vertical marketing. Several semi-quantitative tools (see the section on Self Directed Audit below for an example) are available to assist the wealth creator in consciously thinking of the benefits and affects a business or new technology can bring. While those tools will be discussed in a subsequent work, the wealth creator is challenged here to think deliberately about their own supply chain and their contribution to a restored creation.

The wealth creator will see benefits, though admittedly those are seen mere in sophisticated economies than more developing ones, as other firms in the supply chain prefer to do business with environmentally compliant producers.[23]

A representation of a circular supply chain is given in *Figure 1* below. Examples of companies that are applying the circular supply chain model effectively are written in sections 4.6 and 5.5.3.1 below.

Figure 1: Circular supply chain



Weinhold helps focus the lifecycle analysis by identifying six constituencies or stakeholders a wealth creator's enterprise should bless: customers, employees, supply chain, host communities, natural environment and society.[24]

3.5 Verdant surplus

We are commanded to be stewards of God's creation. Part of that might be an actual greening of one's work place. With the increasing urbanization of the planet, carbon sequestering and beauty can be achieved by covering rooftops, walls, and industrial with vegetation. Unused areas can be turned into gardens or robust ecotypes. Planned shading and natural ventilation can reduce air conditioning use; insulation reduces heating burdens. Rainwater harvesting and grey water use makes for water utilization efficiencies.

Our challenge is to replace grey with green. With increasing urbanization and desertification, we are losing green at an alarming rate. Urbanization has doubled, with 66 percent of the population anticipated to be living in cities in 2050, while 30 percent lived in cities in 1950.[25] Some of those cities have become so polluted as to be a burden to the health of their inhabitants. More than 80 percent of people living in urban areas that monitor air pollution are exposed to air quality levels that exceed the World Health Organization (WHO) limits. While all regions of the world are affected, populations in low-income cities are the most impacted.[26] On one day in 2016, China declared a smog emergency in 24 northeastern cities, cancelling flights, shutting down institutions and curbing road traffic.[27] Due to drought and desertification each year, 12 million hectares are lost (23 hectares/minute), where 20 million tons of grain could have been grown.[28] The impact on water quality and quantity, air quality, and on the land's productive capacity is alarming.

Trees, green space and vegetation can attenuate urban heat stress and reduce temperature by up to 13C compared to full sunlight. Green roofs can reduce energy use by 10 percent.[29] Imagine then, if cultured spaces like homes, streets, business, and public institutions were turned green again. Wealth creators have a critical role in value-added Verdant Surplus development, whether it is vertical farms, rooftop gardens, integrated farming, aquaponics, or other forms of urban farming. This is the one case where money does indeed grow on trees. Our world is portending what Revelation says of going from the garden to the City. It should be remembered that in the middle of the City of God is a garden, the tree of life and the braided river.

3.6 Businesspeople as natural conservers

Businesspeople are natural conservers, practiced at the efficient use of resources. Wealth creators abhor waste. Because of the awe and respect we have for God the Creator, we humbly steward his creation, (Ps 8). As creation stewards, wealth creators acknowledge the resources given to our business are valued gifts. Every wealth creator should look critically at the front end of the supply chain to ensure they are replacing the resources they are using in water and biomass, and using them efficiently. Efficient use of resources is sound business sense as well as sound environmental sense. For Oasis Coffins, it is a deliberate approach to replace and regrow the bamboo they use in their products,[30] not only conserving the environment, but also ensuring continued access to this important resource. For Pankay Pancholi, it was turning eggshells that were normally thrown away in his Just Egg business into a valuable new product as filler material for various plastics to make them more hardwearing.[31]

Businesspeople must take back leadership as conservers and re-creators. Creation care is too precious, too holy, to be left to doomsayers and nihilists, whether secular or those Christians that say we do not need to care because Jesus is coming soon and will replace the current world with his. We are quickly losing species and ecosystems, which means a loss of potential creation of wealth. 'Every extinction is a loss of potential solutions. It is an economic problem, as well as an ethical challenge'.[32] As wealth creators, we would see such a waste of potential solutions as egregious. At the same time as wealth creators restore urban environments, they are passionate leaders in the maintenance of integral natural ecosystems. Wealth creators who follow Jesus knows there are not to define their neighbour as 'the other', but instead collaborate with government and not-for-profit groups to address behavioral and institutional aspects of sustainable development, as well as the technical. Wealth creators know that everything is related to everything else, and therefore know that natural systems need to be maintained in their interwoven complexity, just like business systems do.

One concern is that some (not all) in the environmental industry, both private and NGOs, are self-serving, more interested in a financial line or preserving funding than the truth, empirical data, and a restored creation. Wealth creators, on the other hand, know that good data is important. They demand good financial data and the same rigor in reviewing environmental facts and the environmental market. Wealth creators are servants to the Creator, not self-serving preservers of a flimsy, poorly defended, and biased point of view.

A good example of a skewed debate is the discussion on energy derived by fossil fuel versus other forms of renewable or biofuel energy. This debate is often viewed as an either/or conflict. It is not. Both fossil fuels and the other forms of energy are gifts from God, and we acknowledge him for them. Our problem is not the gift; it is how we use them. The current pollution crises in cities like Beijing or Delhi demand alternatives to excessive use of fossil-fuel derived energy, and much more efficient combustion of such fuels as well as better pollution control in their use. But to threaten to take away the energy-dense advantage of fossil fuels from a trucker bringing foodstuffs to people who need the food is profoundly disturbing.

3.7 Sustainability and long-term profits

An inordinate focus on short-term profits can be considered idolatrous. Building a sustainable company means building an organization that endures, provides an avenue for love in the workplace, stable employment, richer societies, and a longer-term view of protecting the surrounding environment. We are an eternal people. We have the advantage of the long view. We are a redeemed people, and in that redemptive process, we as wealth creators restore creation.

A company is not profitable if it causes excessive environmental degradation; its balance sheet might look all right financially, but it has not counted all its costs on the planet and the people. Wealth creators know that the four bottom lines—spiritual, environmental, social, and financial—are interwoven. Wealth creators are those that plant sufficient for their own needs, but also plant more than they can harvest to share (the gleaning rule). To incorporate environmental stewardship into business is not easy, and to see the opportunities in creating environmental solutions is not easy. But wealth creators can work hard. Wealth creators strive for excellence in all aspects of wealth creation: creating social capital, sustainable and profitable companies, spiritual awakening, and environmental restoration.

Franklin D. Roosevelt is quoted as saying, 'No business which depends for existence on paying less than living wages to its workers has any right to continue in this country.'[33] The corollary applies in respecting the environment. If business takes more than it gives, or destroys two resources to exploit one, it does not deserve to survive.

Firms that go beyond regulatory requirements and focus on prevention may not expect greater returns than those firms that focus on mere compliance or end-of-pipe methods. But both types of firms still perform better financially than non-compliant firms.[34] Caring for creation is in the interest of wealth creation.

Transcend Coffee, for instance, knows that environmental sustainability and corporate social responsibility are important, but for coffee to be truly sustainable, 'the (industry) need(s) to offer first and foremost financial sustainability to those who grow coffee. . . . The issues most pressing at coffee origin are labour shortages and the effects of climate change. With that said, both important issues have at their heart, a lack of financial resource, which places most producers in serious jeopardy of continuing their way of life.'[35] Areas that rely on non-renewable extraction are desperate for more sustainable economic activities that takes the extremes out of the boom-bust cycle.[36] This cycle often leaves a large reclamation deficit.[37]

4.0 Innovative stewardship

Wealth creators are by nature innovators and disruptors. This section discusses how they can bring this energy to solving some of the more intractable economic, social, environmental and spiritual challenges of our day.

4.1 Avenues of innovation

Significant challenges face humankind and the creation from where we draw our earthly life. Whether it is addressing pollution, desertification, shortages or misallocation of resources, businesspersons can bring their God-given talents to love the people of this earth and restore creation through innovative business ideas. 'Nature is a library of patents and ideas.'[38]

Peter F. Drucker says we need results not talk, and those results will come from the prudent application of technology. 'For every single environmental task ahead of us requires technology and above all systematic and purposeful direction of technology almost beyond anything we have ever seen.'[39] Wealth creators are action-oriented and technology-focused.

The Cornwall Declaration summarizes the convergence of full-lifecycle thinking and technical innovation: 'We aspire to a world in which advancements in agriculture, industry, and commerce not only minimize pollution and transform most waste products into efficiently used resources but also improve the material conditions of life for people everywhere.'[40]

One source of ideas for wealth creation are the Sustainable Development Goals (SDGs) generated by the United Nations.[41] The subset of the goals listed below give one an indication of the opportunities for wealth creators to add value. Opportunities for sustainable value-added enterprises abound, and some suggestions are listed in the right-hand column. This list is not comprehensive, but is intended to spur interest in the opportunities available as we work together on these Sustainable Development Goals.

Table 1: Wealth creation opportunities in response to Sustainable Development Goals

Sustainable Development Goal	**Wealth creation opportunities**
End poverty	All business providing dignified work
Achieve food security	Integrated agriculture
Ensure healthy lives	Medical clinics, medical supply initiatives
Provide quality education	Private schools with low entry costs
Achieve gender equality	Innovative and fair hiring practices
Ensure adequate and sustainable water supply	Wastewater treatment; water treatment; water reduction, recovery, and recycling; innovative water conservation
Access to energy	Low-impact power solutions, wire infrastructure, distributed networks including small-scale renewable energy projects
Build resilient infrastructure	Civil construction, civil engineering
Reduce inequality	Innovative and fair hiring practices, establishing businesses in distressed areas
Make cities and human settlements sustainable	Civil construction, civil engineering, landscape and ecological design services, distributed and local solutions in energy and water
Ensure sustainable consumption and production	Supply chain management
Combat climate change	Engineered solutions, pollution-control initiatives
Conserve and sustain the oceans	Ecotourism specifically sensitive to the local ecology they celebrate
Protect, restore and sustainably use terrestrial ecosystems	Ecotourism specifically sensitive to the local ecology they celebrate
Promote sustainable development	Sustainable agriculture with efficient water use and crops appropriate for local conditions

Three great needs stand out: clean water, clean air and clean power. In much of the 10/40 world, these commodities are intermittently available or not available at all. As well as the innovative solutions given in Section 00 below, technologies like micro-hydro and low-impact energy solutions need to be developed by wealth creators.[42] China alone is planning to install an additional 130 gigawatts of wind and solar power by 2020 and making big bets on nuclear power, hoping to satisfy much of the future growth in household electricity demand.[43] The year 2016 was the first year that installing solar panels became cheaper that comparable investment in coal or natural gas, and two thirds of the world will reach 'grid parity' within a few years, even without subsidies. But barriers to investment remain in the form of regulatory uncertainty and conservative financial institutions that still have not defined an asset class.[44] Carbon capture as part of a larger air pollution control impetus is another necessary technology.[45] Over 750 million people have no access to improved water.[46] Wealth creators need to complete the supply chain for forward thinking initiatives like these to succeed, while remembering to take responsibility for the entire supply chain, including the amount and hazard of their 'waste' products.

Wealth creators are desperately needed to meet this Sustainable Development Goal. None of the SDGs above will be achieved by talking about them; they will be achieved by wealth creators filling in the needed business niche. 'Opportunity is missed by most people,' said Thomas Edison, 'because it is dressed in overalls and looks like work.'[47] The list of potential opportunities above is by no means exhaustive; rather the list is intended as a catalyst for even more innovative ideas. It is heartening to know some like-minded firms are already taking up the challenge. Some of those firms are mentioned in the sections below. Other examples have already been given in the sections above. The rest is up to you.

4.2 A call to Christian scientists

It was made clear in the consultation that while the wealth creators attending want to do the right thing, help is required from those practiced in the field of creation care. Christian scientists and others in the applied professions can help in at least three distinct ways.

1. To introduce environmental technologies and approaches that have been bench-tested and are starting field trials, that with the wealth creator's expertise can be brought to full production.
2. To provide rigorous and explicable environmental data at the same level of quality as the financial data that wealth creators use, so that they can make the best decisions.
3. Develop metrics to measure environmental progress within the BAM context. The BAM Global Creation Care Consultation Group has agreed to take this task on, but it needs help from capable practitioners from different economic and geometric spheres.

There is a pressing need for scientists and engineers, and environmental accountants to join the BAM movement so that BAM companies can meet all four bottom lines with excellence and that BAM firms can address the most pressing environmental needs and sustainable development goals profitable.

4.3 Technological leapfrogs

Wealth creators are disruptors. By thinking out of conventional practices, they find novel solutions to the environmental challenges we face. For instance, in Pakistan, where the conventional western system of central wastewater treatment is unaffordable and difficult to implement on layers of complex infrastructure, authorities have opted for distributed wastewater treatment, where each new development is responsible for treating its wastewater. Companies like NBS (section 5.5.1.1 below) and others have adapted to meet this requirement. In much of the developing world where cables and telephone lines were inadequate, cell phones leap frogged over landlines. Frogs can jump backwards too, and they do things better by being simpler. The Wahiya and Zabbaleen of Cairo recycle 80 percent of the waste they collect, using donkey carts and hand sorting.[48] One of the most advanced and technical waste-management systems in the world, in Edmonton, Canada, diverts just over 50 percent of household waste from landfills.[49] Revolutions in the miniaturization of power storage and sample extraction could mean conventional laboratories can be bypassed with accurate and precise measurements in the field, improving response times and reducing costs in managing environmental change.

4.4 Models of innovation

The types of economic models applied to creation care are as varied as the idea of business ecology implies. Teddy Roosevelt, a champion of entrepreneurship, still saw the need to set aside lands in a myriad of national parks and forests to preserve natural resources.[50] What was called conservation in the nineteenth century is called maintaining environmental integrity in the twenty-first century. To some extent, President Roosevelt's conservation response was to the industrialists' excesses of the late nineteenth century and early twentieth century who showed no understanding of environmental stewardship. There is a need to conserve at least ecotypes with minimized settler or industrial impact. However, it could be argued excessive ecotype sterilization is counter to the cultural mandate. Another is the application of profits from one business to another entity requiring environmental improvement. HUBCO is a large multi-industrial firm with operations in Pakistan, including a power plant in Narowal. They elected to fund a bioremediation sewage treatment plant in Poong village near their facility.[51] More details are provided in section 5.5.1.1 below. The last model is a for-profit model. The for-profit model is the most sustainable because the entity propagates its own self-generating value. The key to this model working for the environment and not against it is to ensure it applies the full circular supply chain model, executes the cultural mandate and sees itself as a creation steward. Companies like Oasis Coffins show how this model can work.[52] Saying that, Martin Osserwarde avers governments can be partners in wealth creation and sustainable development.[53]

4.5 Examples of innovation

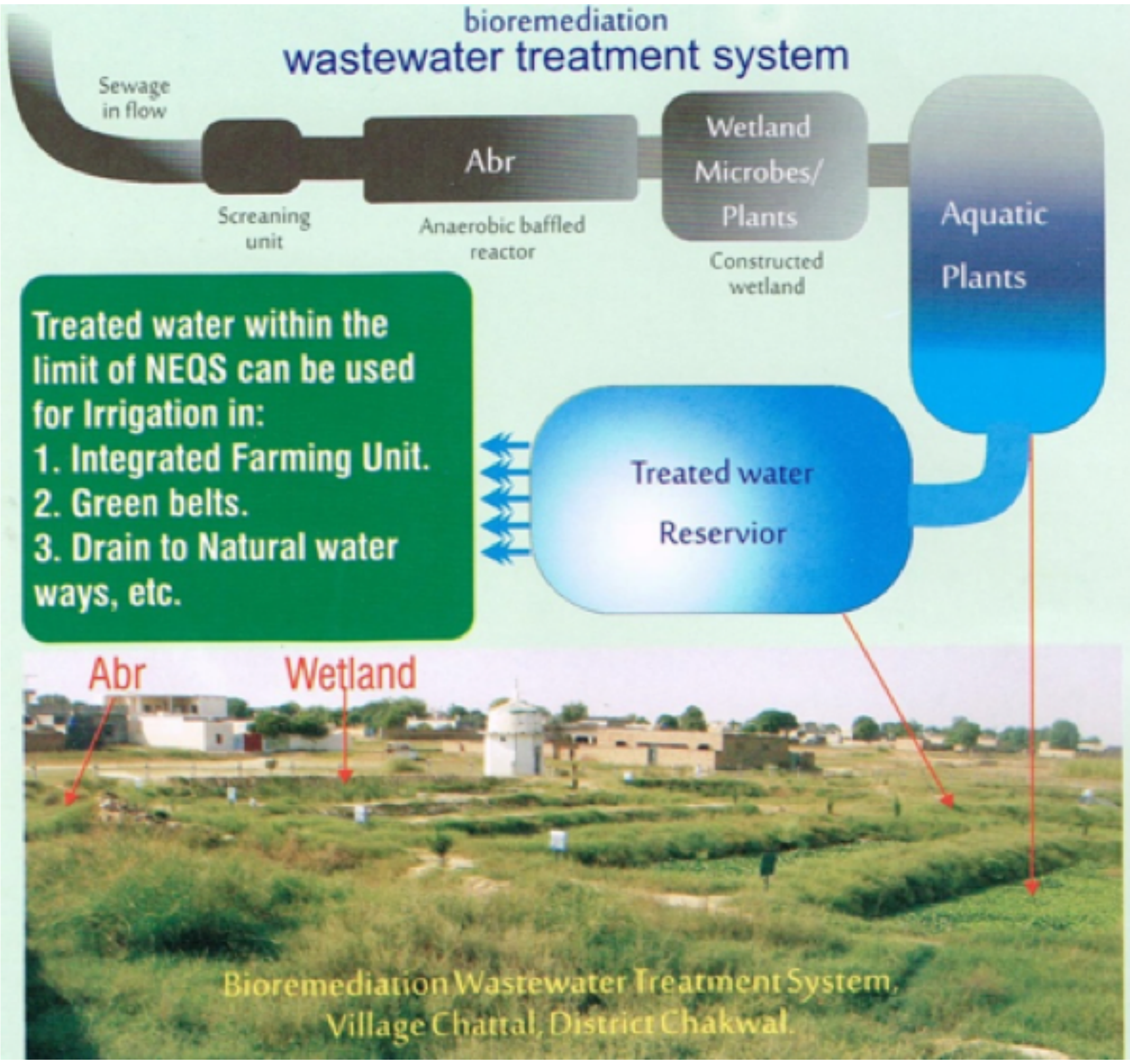
Case studies given below complement the examples given above about companies that are acting as creation stewards and wealth creators.

4.5.1 Environmental excellence in the urban and industrial environment

4.5.1.1 Case Study: NBS

An inspiring example of the application of environmental ingenuity to sustainable water management in an urban and village environment is Nano Bio-Solutions PVT Ltd. (NBS) innovative wastewater treatment known as Bioremediation Sewage Treatment. NBS works primarily in Pakistan. Pakistan's increasing population combined with reduced water availability as climate change impacts the Punjab means that every drop of water is used. This means that untreated sewage stored in ponds contaminates groundwater used for drinking water and/or is directly used in watering crops, resulting in the unnecessary transmission of gastrointestinal diseases, hepatitis, and other waterborne ailments. Conventional water treatment is hampered by heavy capital investment, inconsistent power supplies, and lack of trained personnel. NBS has overcome these challenges by providing a gravity-based system centered on bioremediation and phytoremediation, using indigenous bacteria and plants to treat the water. Where power is needed to raise water, a solar powered pump is used. NBS has established more than 90 such facilities throughout Pakistan. NBS is a classic example of an environmentally oriented company working hard to achieve all four bottom lines. Spiritually, the company, which is run by Pakistani Christians, is an example and inspiration to the larger national community. Socially, their facilities result in immediate reduction of the spread of waterborne diseases. Environmentally, their technology has restored streams to health and provided safe irrigation water. Financially, they are struggling and require other wealth creators to come alongside with comptroller expertise and patient capital to guide them in the running of their business.

Figure 2: NBS Bioremediation process flow [54]



4.5.1.2 Case Study: Chandos Construction Ltd. (Chandos)
Chandos is a Canadian based construction firm that proves that striving for environmental excellence is part of a commitment to business excellence, and a commitment to holistic transformation. Chandos is an employee-owned partnership, broadly established on the Mondragon principle. Chandos' model of success is based on their employee's responsibility, performance, and terms of service, and has led to a 40 percent return on capital.[55] While employee owned, it is overseen by a professional board of directors, and has both internal and external audit controls. Chandos is a leader in social, community, and environmental responsibility. Contributions in these areas are allocated to organizations that the employee owners choose to support. They excel in customer service, and support their industry by delivering innovative construction solutions.[56] Chandos is a leader in Integrated Project Delivery,[57] a collaborative building programme that integrates subcontractors, owners and the general contractor to work together. This passion for justice and collaboration while netting a decent return for their employee owners has led to environmental excellence as well. Chandos is a Leadership in Energy and Environmental Design (LEED) builder. LEED is a popular green building certification program. Chandos built the most northerly net zero commercial building in the world. Chandos built some of the first LEED projects in Alberta and have received prestigious awards from their leadership in recycling construction waste.[58] On construction projects, the average waste diverted away from landfills in the four years 2013 – 2016 was 73.45 percent. Two individual projects had over 98 percent waste diversion, an unprecedented number.[59]

4.5.1.3 Case Study: Yoho Venezia
The Park Yoho Venezia residential sub-division development could be a good case study to see how development and environmental conservation can go hand-in-hand and achieve a satisfactory result. This could shed some light on resolving the perceived tension between the relentless pursuit of business profit and the passionate defence of the handiwork of the Creator.

The development site falls within the Wetland Buffer Area (WBA), an environmentally sensitive area, in the New Territories of Hong Kong. In order to have that site developed, the developer needs to secure government approval for a land grant. Though only 25 percent of the land area in Hong Kong is built upon (considered urbanized), in recent years, there is a growing concern, if not opposition, regardless of the acute housing shortage in the city , to block further development which is considered to be damaging to the environment. Environmental activists as well as social movement leaders are keen on turning up the rhetoric to mobilize the public to give pressure to the government not to approve land grants as they argue that developments would impose 'irreversible damage' to the proposed areas.

The development site in this case is comprised of approximately 100,000 square metres. The developer intends to build 1,027 apartment units with low-density design layout. Understanding the almost impossible predicament of accommodating both development need and environmental protection, the layout of the proposed development had been carefully designed with respect to the surrounding environment. The proposed development includes extensive greening and more than half of the site was proposed for wetland conservation as well as landscaping, to enhance the overall amenity of the site and serve the buffer function of the Wetland Buffer Area.

An in-depth and extensive Environmental Impact Assessment was part of the land grant application. Various mitigation measures, including efforts to locate the several building blocks closer to an existing main road, allow adequate buffer distance from the existing meander, and erecting noise barriers during construction, had been adopted to minimise off-site ecological impact on the adjacent river. Based on the bird survey conducted, the proposed buildings were not under the existing flight path of the birds and the number of birds observed within the possible disturbance distance from the proposed development was insignificant during the dry and wet seasons, indeed many of them were disturbance-tolerant species. As there was no flight path of birds across the building site, the proposed development would have little impact on the birds. Furthermore, a building gap of not less than 35m was maintained between the two apartment blocks to enhance wind penetration.

Despite the proposed development generating more traffic, better-designed traffic systems actually lowered the impact compared to the existing traffic at the site. Besides, the layout and building disposition of the proposed development had been carefully designed in order to confine the traffic to the eastern part of the site. Basement car parks were also designed to minimise at-grade traffic. The direct impact on the adjacent habitat caused by traffic was minimised.

From the design phase to the application process, the developer has been working closely with both the local residents who are living in the nearby rural villages for generations, as well as a highly recognized environmentalist as a consultant for the project. It was a lengthy process of over five years of planning and seeking for approval. There were some sporadic opposition and protests even on site. Yet, the team determined to keep this a very transparent process, and was ready to answer questions when asked. When the government also agreed that the applicant's survey and proposed solutions were in line with the findings of the Environmental Impact Assessment studies, the land grant was approved.

The final outcome is a residential sub-division being completed that offers 1,027 units for as many households. Residents will not only enjoy the tranquillity of the surrounding natural environment, but also the accessibility to modern lifestyle. At the end, on that 100,000 square metre site, almost two-thirds of the site remains in its wetland condition, while the rest is covered by 'development'. Furthermore, part of the residents' management fee will also be set aside exclusively for maintenance of the landscape and wetland area, assuring that the conservation effort will be sustainable.

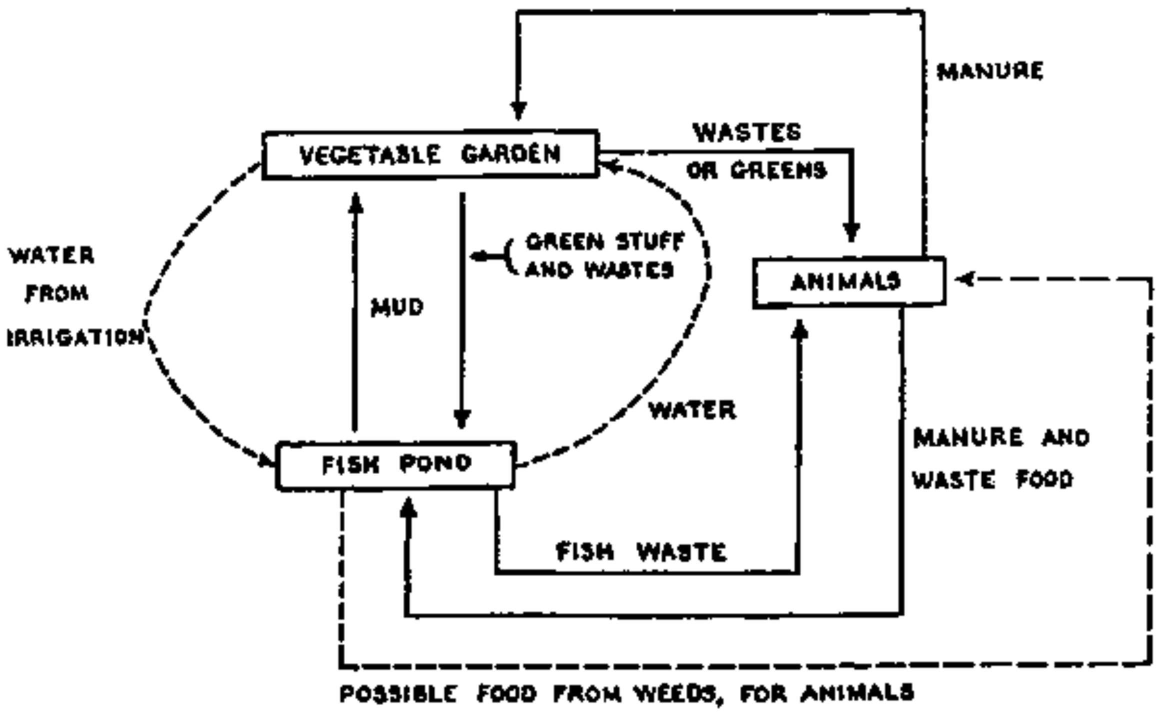
This is a case when all the stakeholders are willing to work with each other, and put aside an adversarial attitude, true collaboration and a win-win conclusion can be achieved. The government's policy priority of facilitating more new units to the market; those who want to buy into the housing market; environmental protection advocates who passionately defend the wetland; as well as the developer who wants a profit-making project all may claim some form of victory in this exercise. Collaboration is always better than bitter rivalry among the different agendas; and such responsible stewardship of each party will bring about transformation—socio-politically, inter-personally, as well as environmentally.

4.5.2 Agribusiness and wild areas, a holistic approach

4.5.2.1 Case study: Integrated farming

Johan Janse van Rensburg saw a problem. While villagers in Tajikistan had relatively good access to carbohydrates, they only had intermittent access to greens and to protein. The problem was exacerbated in the Afghan refugee community who had no access to land or work, depending on their status, and at the most had a small courtyard within their *havli*. Johan came up with a model of intensive protein and greens production in a small space (The Three-in-One Franchise). Using aquaponics as a model with water circulating from a fishpond to a hydroponics greenhouse, he added rabbits and chicken—both halal meats. The waste products of the rabbits and fish provide nutrients for the plants in the hydroponic towers. Based on an Oregon State University study they are also substituting the waste from the rabbit cages for 10 percent of the high-energy chicken feed (expensive for villagers), thus saving cost. (Rabbit feces contains 22 percent protein compared to wheat/corn's average of 11 percent protein). The unit is capable of housing 500 chickens, 22 mature rabbits and offspring, 200 carp and about 2,000 tomato plants. Right now, the development of the effort is supported by a parallel feed business. The movement of this initiative from 'beta' test to the field could be done through a franchise model.[60] The environmental benefits are apparent. Waste product from one source of production provides nutrients for another source. An added benefit in supplementing diets with these new protein sources is the reduction of erosion by reducing grazing pressure of conventional protein sources: cattle, goats and sheep. The layout can be adapted to the available space. Improvements to the social bottom line come from improved and more consistent nutrition and an added source of revenue. The initiative provides legitimacy for workers to enter the most remote villages and insular communities. The final economic model still needs to be worked out, whether it can be a for-profit model or a social entrepreneurship model. It appears it can be carried best by NGOs who would input time and logistics to supplement the program.

Figure 3: Example of an integrated farming cycle



4.5.3 Environmental excellence in product manufacturing

4.5.3.1 Case Study: Tirta Marta

Tirta Marta is helping Indonesia's environment and its economy by replacing traditional plastics with biodegradable alternatives, with raw materials sourced through cassava farmers who now earn a fair trade income. Plastic is a low cost alternative to glass and aluminum for packaging and each year the world's population uses 275 million megatons of plastic. While the 3R concept of recycle, reuse, and reduce can help minimize plastic's impact on the environment, much of the world's plastic still finds its way to landfills, rivers, oceans, or incinerators. Traditional plastic left behind takes 500 to 1,000 years to degrade. Tirta Marta believes that without the capacity to provide the world with value added goods and services, Indonesia has limited the distribution of wealth to the poor. The need to add value to farmed goods in tropical countries is well known, especially for goods like cassava (tapioca) which is widely grown but has not been able to produce significant income for farmers. Tirta Marta created a cost competitive biodegradable plastic out of cassava that not only reduces the carbon footprint of plastic by 40 percent, but also revolutionizes the industry. Tirta Marta has brought to market two innovations in affordable biodegradable and degradable plastic for social and environmental impact: OXIUM® and ECOPLAS®, available as an additive and resin are used in finished products that include shopping bags, packaging, lunch boxes, re-useable totes, and coat hangers. OXIUM® is an additive that catalyzes degradation in plastic. For example, a standard plastic shopping bag with OXIUM® begins to break down in two years eventually becoming bio available at a molecular level. OXIUM® is priced to be only 2-5 percent more expensive than traditional plastic. Positioned for mass-market adoption, OXIUM®, within two years, has captured more than 90 percent of

Indonesia's modern markets and convenience stores using plastic shopping bags. The second innovative product is ECOPLAS®, a biodegradable polymer made from tapioca. ECOPLAS® can be made into blown film or injection molded products, and is the first 'Fair for Life' certified bio plastic in the world. Certified by the IMO for Fair for Life, Tirta Marta is the only bio plastic producer with the ability to make a Fair Trade claim. A 2012 Assessment indicated a 40 percent carbon footprint reduction and a 25 percent income increase of 50 cassava farmers. The ability to degrade plastics, while not quantifiable, is certainly a qualitative improvement. The current President Director, Sugianto Tandio, invested ten years of Tirta Marta's resources in research and development towards environmentally sustainable plastics.[61] Mr. Tandio needs help. Quoted in an interview, Mr. Tandio says, 'Now that we have the technology, we can introduce it to other markets. What we would be interested in are partners in international markets to introduce our technology. Research and development is very costly and we cannot do it alone'.[62]

4.5.3.2 Case Study: Reed Consulting Ltd. (Reed)

The manufacture of garments for the North American and European markets can be detrimental both in the low wages paid to the production workers compared to wages in the countries where the garments are sold and also costly in terms of the amount of clean water needed to turn cotton into garments or skin into leather. The demand for low cost garments coupled with the European and North American pollution control regulations has exported industrial pollution to developing countries. This 'out-sourcing' also exacerbates the water crisis in many of those developing countries because of the competition between water for industry, water for agriculture and water for domestic use. Manufacturing one pair of USD 7 denim jeans can use as many as 250 litres of water when the achievable target need only be 70 litres. Two hundred and fifty litres of clean water used during the process of denim dyeing and then denim laundering to create the faded and 'distressed' fabric effects so appreciated by Western customers takes a large volume of water away from the local people. This is because their shallow lift hand-pumps cannot compete with the motor driven deep tube wells of the garment factories.

Reed was incorporated in Bangladesh in 2006. The company was from the beginning 'Business as Mission' activity in a country where the rivers were already highly polluted because of textile and leather processing. A country where access to drinking water was also limited because of polluted surface water, the aquifer under Dhaka began dropping unsustainably by between two and three metres per year. Run by Ann and Rodney Reed from the UK, the company employed Bangladeshi engineers and consultants to work in factories producing for many of the large European and North American garment brands. The company benefitted from industrial environmental contracts placed by international Development Agencies including the International Finance Corporation (part of the World Bank Group) and German Technical Corporation (GIZ). The company team appreciated opportunities to work with European experts in order to enable factories to reduce the amount of water and chemical and energy used in garment and leather manufacture. This 'water-chemical-energy nexus' was regarded as a critical point for the company to engage in Creation Care in garment processing.

The factory owners were not initially motivated to reduce pollution. They regarded it as an additional expense, but they soon came to recognise the win-win, because reducing these inputs actually improved their profitability—the same number of garments or more garments produced with fewer inputs. Reed was only one of the consulting firms acting in this field, but it was certainly the only Bangladesh business driven by the Creation Care mandate in this field. Large amounts of water were saved and thus made available for human consumption, equivalent in volume to many Olympic-sized swimming pools. Reduction in the amount of electrical and thermal (steam) energy used in the factories was also achieved. Cleaning up the Bangladesh rivers remains a daunting challenge but reducing the outflow of polluted water from so many factories achieved through the Creation Care intervention of Reed Consulting Bangladesh Ltd contributed to cleaner rivers.[63]

4.6 A call to action and equipping

This paper is a call to action. It is a call to action for wealth creators to lead the charge in creation care, to bring back hope to the debate of environmental stewardship. It is a call to collaborate with all people of goodwill to take care of our common home. It is a call to organize scientists and wealth creators to work together to provide solutions for environmental problems as part of holistic transformation. It is a call to provide practical guidelines to help wealth creators to run their businesses and personal life as environmental stewards. While there is a wealth of measurement protocols, environmental toolkits, and resources, they require consolidation, simplification, and reorientation to a creation stewardship model. Lastly, wealth creators must do what they do best—innovate and produce environmental solutions that have Kingdom consequences, social value, and that are financially sustainable, with the help and support of the rest of us.

5.0 Reading list

The authors do not agree with all the theses presented in each of the publication presented below, but found all the readings compelling, even in the few cases where the opinions were contrary to his own.

Beltran, Benigno P. *Faith and Struggle on Smokey Mountain: Hope for a Planet in Peril.* Maryknoll, NY: Orbis Books, 2012.

Berry, Wendell 'Christianity and the Survival of Creation.' In *Sex, Economy, Freedom & Community: Eight Essays*, 1st ed. New York: Pantheon Books, 1993.

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Lomborg, Bjørn. *The Skeptical Environmentalist*. Cambridge: Cambridge University, 2001.

Provan, Iain. *Convenient Myths: The Axial Age, Dark Green Religion, and the World That Never Was.* Waco, TX: Baylor University Press, 2013.

Regent College. *Redux: Fully Human in a Broken World. The Earth, the Garden, and a Reason to Hope*. 2015, http://www.regentredux.net/fully-human-in-a-broken-world.

Tunehag, Mats, *Creation Care vs. Creation Scare*. 2013, http://matstunehag.com/2013/07/11/creation-care-vs-creation-scare/ .
Wilson, Edward O., *The Creation: An Appeal to Save Life on Earth*. New York: W.W. Norton, 2006.

5.1 Self-directed audit

The example below gives a simple metric to assess environmental performance. This simple metric combines qualitative questions along with risk assessment, where mitigation can be thought through and applied to reduce environmental risk. A more thorough metric that the authors have applied in projects is the Global Footprint approach.[64]

Purpose

ibex INTERNATIONAL ASSOCIATES

This document is intended to support the environmental component of the Ibex due diligence process and Section 10 of the mentoring process.

Reason

The Earth is the Lord's (Psalm 24:1)

Creation is Good Genesis (1:9b)

We are its Good Stewards Genesis (1:28)

Creation Care

Is there a conscious effort to raise environmental awareness and to minimize environmental damage through company operations?

Is there a plan to reduce waste through more efficient consumption of inputs, reuse, recovery and recycling?

Knowledge of Lifecycle – conscious or at least intuitive understanding of impact. Review appended drawing and walk through the company's lifecycle.

Do you know the supply chain? Is it stable? Is it sustainable?

Is the site disordered? If so, what immediate and remedial action will be carried out? By when, by whom?

Is their visible or suspected contamination of air, water or land? If so, what immediate and remedial action will be carried out? By when, by whom?

Risk management: Are there environmental risks with a high consequence and high probability that need addressing straightaway? Please see the appended table.

Business opportunities. Within your core business, are their environmentally appropriate business opportunities that would improve urban and/or natural environments?

God made us in his image to be creative. What beautiful thing are you creating through your company? Tell me more. How can Ibex help? For more assistance please email pmm@threefootings.com

Mitigation Table

Activity	Effect	Effect Grade	Mitigation	Residual Effect
Type of action	What that action does	Consequence (c) times probability (p) after mitigation (High, Medium, Low) e.g. high c x high p = High high c x medium p = Med. High medium c x high p = Med. High medium c x medium p = Medium medium c x low p = Low low c x medium p = Low low c x low p = Low	What to do to reduce consequence. Must act on High and Medium High.	consequence times probability after mitigation
Example - Cutting of leather	Inefficient use of leather causes wastage	high c x high p = **HIGH**	Reduce wastage by laying out patterns to use the greatest part of the leather	low c x low p = **LOW**

Appendix

Consultation on Wealth Creation (CWC): Background and Context

The CWC was not just an event. The Consultation held in Thailand, in March 2017, was a part of a consultative process, which in turn is part of broader, longer, and on-going conversations related to issues like the church, business, poverty, wealth creation, and missions.

Therefore, it is important to understand the background and context of each CWC report. They are important pieces of a bigger puzzle. To understand the picture that is emerging, as we put the pieces together, one needs to see some of the other key pieces.

The CWC is yet another outcome of the historic commitments adopted in the Lausanne Covenant of 1974. Here, while committing themselves to the importance of evangelism, evangelicals also expressed repentance for 'having sometimes regarded evangelism and social concern as mutually exclusive'. Wealth creation for the economic betterment of our world is one of those neglected social concerns; and it is this that the CWC addresses.

All CWC participants were presented with a list of required reading. These readings all related to the **CWC assignment** of exploring the *Role of Wealth Creation in Holistic Transformation of People and Societies*.

The CWC was partly a follow up of the *Lausanne Global Consultation on Prosperity Theology, Poverty and the Gospel* held in April 2014. Thus, all needed to be familiar with the **Atibaia Statement**: https://www.lausanne.org/content/statement/atibaia-statement (more information below).

The Lausanne Global Consultation on Wealth Creation was in collaboration with BAM Global, and thus some of its work and reports were included in the required reading.

'Why Bother with Business as Mission', by Mats Tunehag

http://matstunehag.com/wp-content/uploads/2011/04/Why-Bother-with-Business-as-Mission-v-18-April-2017.pdf

The executive summaries of three BAM Think Tank Reports

- Biblical Foundations for Business as Mission
  http://bamglobal.org/report-biblical/
- Business as Mission and the end of Poverty
  http://bamglobal.org/report-bop/
- Business as Mission in Haiti
  http://bamglobal.org/report-haiti/

CWC is linked with three other global consultations that dealt with similar issues, held 2004, 2009, and 2014.

The Lausanne BAM Issue Group

The first BAM Global Think Tank was held under the auspices of Lausanne. The Business as Mission Issue Group worked for a year, addressing issues relating to God's purposes for work and business, the role of business people in church and missions, the needs of the world and the potential response of business. It summarized its findings in the **BAM Manifesto** (2004). Here are a few excerpts, to illustrate a growing consensus among leaders that wealth creators are called by God to serve in business.

- *We believe that **God** has created all men and women in His image with the ability to be creative, creating good things for themselves and for others—this includes business.*
- *We believe in following in the footsteps of **Jesus**, who constantly and consistently met the needs of the people he encountered, thus demonstrating the love of God and the rule of His kingdom.*
- *We believe that the **Holy Spirit** empowers all members of the **Body of Christ** to serve, to meet the real spiritual and physical needs of others, demonstrating the kingdom of God.*
- *We believe that God has called and equipped business people to make a **Kingdom** difference in and through their businesses.*
- We believe that the **Gospel** has the power to transform individuals, communities and societies. Christians in business should therefore be a part of this holistic transformation through business.
- We recognise the fact that poverty and unemployment are often rampant in areas where the name of Jesus is rarely heard and understood.
- We recognise that there is a need for job creation and for multiplication of businesses all over the world, aiming at the quadruple bottom line: spiritual, economical, social and environmental transformation.
- We recognise the fact that the church has a huge and largely untapped resource in the Christian business community to meet needs of the world—in and through business—and bring glory to God in the market place and beyond.
- See also **BAM Manifesto**: http://matstunehag.com/wp-content/uploads/2011/04/BAM-MANIFESTO-2.pdf

Wheaton Consultation

A global consultation on ***Business as Integral Calling*** was held in Wheaton, Illinois in October 2009. It brought together leaders from the realms of business, non-profit organizations, and Christian ministry with theologians and academic leaders in business, economics, and missions. Excerpts from the **Declaration**:

- ***Lamentations***

- We lament that the church and business itself have undervalued business as a vehicle for living out Christ's calling, and have relied excessively on non-profit approaches that have resulted in dependence, waste, and an unnecessary loss of human dignity.

- ***Celebration of Faith and Hope***

- *We celebrate the growing movement of people seeking to be used by God and to deploy business economic activity for God's Kingdom.*
- *Business can create value, provide the dignity of work, and transform communities by improving livelihoods.*
- *Business can be an integral calling to proclaim and demonstrate the Kingdom of God by honoring God, loving people, and serving the world.*
- *Business can also provide a powerful opportunity for the transformation of individuals to achieve their full potential for creativity and productivity and to flourish and experience a life of abundance as envisioned by the Kingdom of God.*
- *Business can be used to help restore God's creation from its degraded state.*
- ***It is our deep conviction that businesses that function in alignment with the core values of the Kingdom of God are playing and increasingly should play an important role in holistic transformation of individuals, communities and societies.***
- See also **Wheaton Declaration**: http://matstunehag.com/wp-content/uploads/2017/05/Wheaton-Declaration.pdf

Atibaia Consultation

Wealth creation and distribution were discussed as part of the ***Lausanne Global Consultation on Prosperity Theology, Poverty and the Gospel*** held in Atibaia, Brazil in 2014. The consultation affirmed that sharing wealth is good and biblical, but wealth distribution is too often our main response to meeting peoples' needs. It identified the need to seek increasingly to understand how businesses can bring solutions to global issues, including poverty and human trafficking. The notion of simplicity as a universal value was also challenged, and needed to be addressed further.

The **Atibaia Statement** is quite long, but here are a few excerpts related to wealth creation, business and the poor.

- *Christians are called not only to give and share generously, but to work for the alleviation of poverty. This should include offering alternative, ethical ways, for the creation of wealth and the maintenance of socially-responsible businesses that empower the poor and provide material benefit, and individual and communal dignity. This must always be done with the understanding that all wealth and all creation belong first and foremost to God.*

- *We acknowledge that, in the global market economy, one of the most effective tools for the elimination of poverty is economic development, and yet evangelicals have often failed to promote value-driven business solutions to poverty.*
- *How can we more effectively work for the establishment of creative, ethical, and sustainable business endeavors in the fight against poverty?*
- See also **Atibaia Statement:** https://www.lausanne.org/content/statement/atibaia-statement

Endnotes

[1] Editor's Note: In the Manifesto, 'Church' (with uppercase) and 'church' (with lowercase) are used intentionally, the former denoting the global Church and the latter the local church.
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