



Challenge and Hope

How Business Can Help
the Planet and Its People
Flourish

BAM and Creation Care Series Part 3

Challenge and Hope

How Business Can Help the Planet and Its People Flourish

Issue Group Report BAM Global Creation Care Consultation March 2023

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Foreword

We often say that Business as mission is a concept, practice and a global movement.

Business as mission (BAM) is an idea, a **concept**, that is deeply rooted in biblical principles and our Judeo-Christian tradition. We see in scripture that business is part of God's design for human flourishing. We can point to powerful impact through the intersection of business and mission throughout church history.

BAM is also a **practice**, a set of real-life daily operating procedures for companies around the globe. In every continent today there are business as mission practitioners intentionally demonstrating God's kingdom in daily business life. They are bringing the 'whole gospel' in word and deed, aiming to have a positive environmental, social, economic and spiritual impact.

Furthermore, BAM is a **global movement** of leaders in business, church, missions and academia. The idea and practice of business as mission does not belong to one organisation, company network, or region. It is a move of the Holy Spirit stirring among Christ-followers in the marketplace, in every corner of the world. And it is part of a much bigger picture of God establishing his kingdom on earth as it is in heaven.

BAM Global has been developing the concept of business as mission, and connecting people around it, since 2002. Through global conversations and meetings, we have gathered and shared social and intellectual capital. Over 500 people from around 50 nations have participated in BAM Global Think Tank groups that have reviewed and discussed BAM from theological, historical, practical, ecclesiological, missiological, ecological, economical and global perspectives.

This has resulted in about 30 ground-breaking reports, including the BAM Manifesto and the Wealth Creation Manifesto. These processes have also catalysed a growing global movement of national and international BAM networks. Today BAM is practiced on all continents and applied in thousands of companies, operating in over 20 languages.

We rejoice in the growth and thank God for the impact. But we have not arrived. We are on a journey and committed to being a learning movement. To that end we continue to organise consultations to deal with important and pressing issues related to BAM and the world.

Our sincere thanks goes to all those who have co-laboured with us to bring this next wave of Think Tank consultations to fruition. We pray that these papers, case studies, tools, recommendations and resources would go out widely, and encourage and equip you as well as invigorate the global BAM movement.

Now to him who is able to do immeasurably more than all we ask or imagine, according to his power that is at work within us, to him be glory in the church and in Christ Jesus throughout all generations, for ever and ever! Amen. (Ephesians 3:20-21, NIV)

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Executive Summary

Challenge and Hope: How Business can Help the Planet and Its People Flourish

As BAM and Creation Care Part 1¹ concluded, *all* businesses are environmental businesses and we need the BAM community to be leading the way in recognising this.

This is the first major theme of the BAM and Creation Care Consultation; that *every* business as mission (BAM) entity has the opportunity to grow in their care of creation.

While *all* BAM companies can become better environmental stewards, there is a second major theme to the BAM and Creation Care Consultation; the opportunity for *some* Christian entrepreneurs and investors to create *new* BAM companies that address critical environmental problems with innovative business solutions and new technologies.

Acute environmental damage and degradation is often to be found in places suffering dire poverty and in places relatively unreached with the gospel. This presents BAM practitioners and investors with the challenge and opportunity to respond holistically with environmental solutions at the heart of their business model. Business as mission companies serve people who face great environmental, even existential challenges. BAM practitioners are on the ground already in many areas of the greatest need and are positioned to respond.

This report explores how to meet the pressing environmental challenges that face us today with the hope we share and the technical capabilities we can access. It focuses on the provision of air and water solutions that can best meet the needs of unreached peoples who desperately need the gospel *and* access to clean air and water.

It concludes with an exhortation to respond with the gifts and experience that each of us have, a series of recommendations and a corresponding action plan.

We thank God that he is at work, stirring us in the business as mission community to be part of the solution. This paper seeks to further encourage God-honouring entrepreneurs and investors to mature and mobilise new technologies and companies that will help to care for creation and be 'good news to the poor' (Luke 4:18).

¹ Download Part 1 at: <https://bamglobal.org/creation-care-part-1/>

The BAM and Creation Care Report Series

Background to the Consultation

The BAM Global Think Tank (2012-2013) and BAM Global Congress in 2013 identified that 'BAM and Creation Care' lacked focus, conversation, resources and collaboration within the BAM community. The **BAM Global Creation Care Consultation Group** (Consultation Group) was established to address this gap and to help business as mission (BAM) companies fulfil their environmental stewardship mandate within their business and in the wider world.

The goal of the Consultation Group has been to serve BAM companies who are committed to the four bottom lines of spiritual, environmental, social and financial impact and sustainability as they deliver the Good News of Jesus.

We aim to serve BAM companies by:

1. Providing a link to services that can help them develop robust environmental management systems;
2. Encouraging those who are developing technologies through their companies to provide clean air, clean water, clean food and clean energy to the spiritually and materially impoverished; and
3. Providing easy-to-use toolkits and educational resources to help BAM companies be good environmental stewards.

While the Consultation Group's work is focused particularly on environmental sustainability, we recognise that ours is a holistic gospel, in which the four bottom lines—or areas of missional impact—form an integral whole that should not be separated.

Introduction to the Creation Care Report Series

In 2017, the paper *Wealth Creation and the Stewardship of Creation* (Polet & Tsui, 2017) was published as part of the Wealth Creation Report Series². This paper was successful in raising discussion at the intersection of Kingdom-minded businesses and environmental sustainability. We consider this paper to be 'Part 0' of the current series, i.e. an essential precursor and a helpful foundation for this report and the ones to follow.

In addition, several blog posts, particularly on the Business as Mission Resource website³ businessasmission.com and the Father's Earth blog⁴, kept the discussion going. Presentations at the BAM Congress Netherlands in 2018 and 2019 formed a nexus of discussion.

² A series of papers from the Global Consultation on Wealth Creation for Transformation, organised by the Lausanne Movement and BAM Global in Chiang Mai, Thailand, in March 2017. See: <https://bamglobal.org/reports/special-reports/>

³ Article series on Environment & Creation Care on The BAM Review Blog hosted at Business as Mission Resource website, see: <https://businessasmission.com/category/environment-creation-care/>

⁴ Father's Earth blog, see: <https://fathersearth.ca/>

In April 2018, the Consultation Group met in Delft, the Netherlands, in person and virtually. From that meeting, three overarching themes emerged which were each developed into papers that form part of this current BAM and Creation Care Report Series:

1. **What are the major global sustainability issues that BAM companies will face and how can they help?** What are the most important facts, lessons or principles of creation care we must promote or teach within the larger BAM community? The responses to these questions were published in September 2022 as *'One Big Thing: The One Thing a God-honouring Business Must Do to Be a Good Creation Care Steward'*, BAM and Creation Care Part 1.⁵
2. **What challenges do BAM companies face in meeting their sustainability goals?** A survey was sent out to BAM practitioners in January 2020 and the results were published in March 2023 as *'How are We Doing?: An Environmental Stewardship Survey of BAM Practitioners'*, BAM and Creation Care Part 2.⁶
3. **Where can the provision of environmental technologies help people flourish as they receive the Good News?** An analysis of air pollution and water scarcity data lays out possible geographical areas where BAM companies might apply environmental technologies. A presentation on these questions and issues was made at the BAM Global Congress online in April 2021. This paper, *'Challenge and Hope: How Business can Help the Planet and Its People Flourish'*, is the written version of the video presentation⁷ and is published as BAM and Creation Care Part 3.

In addition, one of the major findings from the survey completed for Part 2 above was the need for environmental management tools for the BAM community. From that finding, the following question was addressed in a BAM Global Workshop in May 2021:

4. **What are the foundational aspects of an environmental management system for a BAM company?** A written version of this work is to be published in April 2023 as *'Caring for Creation: Environmental Management Systems for BAM Companies'*, BAM and Creation Care Part 4.

Each part of this BAM and Creation Care Report Series will include resources, recommendations, and action plans.

After the initial meeting in 2018, members within the group and experts from without were consulted on each paper by asking them specific questions and/or for reviews. This approach proved more effective than holding further meetings, which were difficult to schedule. We stayed in touch via email, through chat platforms like Slack, and held one-on-one discussions, as needed.

The four BAM and Creation Care Report Series parts outlined above were finalised after the BAM Global Congress 2021 to incorporate the discussions held there.

⁵ Download Part 1 at: <https://bamglobal.org/creation-care-part-1/>

⁶ Download Part 2 at: <https://bamglobal.org/creation-care-part-2/>

⁷ Watch the video presentation at: <https://businessasmission.com/challenge-and-hope-how-business-can-help-the-planet-and-its-people-flourish/>

Challenge and Hope

How Business can Help the Planet and Its People Flourish

BAM and Creation Care Series Part 3

Introduction to ‘Challenge and Hope’

As Part 1⁸ of this series concluded, *all* businesses are environmental businesses and we need the BAM community to be leading the way in recognising this.

This is the first major theme of the BAM and Creation Care Consultation; **that every BAM entity has the opportunity to grow in their care of creation.** This first theme is the particular focus of papers 2 and 4 in this series, aimed at helping BAM practitioners implement effective environmental management practices and gain in positive environmental impact.

While *all* BAM companies can become better environmental stewards, there is a second major theme to the BAM and Creation Care Consultation; **the opportunity for some Christian entrepreneurs and investors to create new BAM companies that address critical environmental problems with innovative business solutions and new technologies.**

Acute environmental damage and degradation is often to be found in places suffering dire poverty and in places relatively unreached with the gospel. This presents BAM practitioners and investors with the challenge and opportunity to respond holistically with environmental solutions at the heart of their business model.

This second theme is the focus of this paper.

A New Perspective on God’s Good Earth

We want to take you on a journey of challenge and hope on God’s good Earth. And to do that we are going to start at the moon.

It has been 55 years since the crew of Apollo 8 circled the moon and took the now famous picture of the Earth rising over the desolate lunar surface. It is estimated a quarter of the earth’s population saw the Apollo 8 broadcasts, and the photo itself was an inspiration for the first Earth Day in 1970.

The photo still evokes a sense of wonder. This little blue jewel framed by the lifeless moon and the vastness of space. Our precious, fragile, home, (Polet, 2019).

On Christmas Eve, 1968, as the Apollo 8 astronauts rounded the moon for the ninth time, they read the first ten verses from the Book of Genesis back to Earth. They ended their reading with, “God bless all of you, all of you on the good Earth.”

⁸ See: <https://bamglobal.org/creation-care-part-1/>



Figure 1: The Earth from Apollo 8 (Anders & Weigang)

Captain James Lovell of Apollo 8 framed the challenge and hope we have as God's stewards of this good Earth:

We did something that ended up showing the Earth and its people exactly how we existed, where we are. That we were really here on Earth a space craft and we are all astronauts and whether we liked it or not, that like we were in (the) spacecraft having to work closely together to accomplish the mission.

Down here we seem not to be able to do that. (quoted in Vaughan-Lee, 2018)

This paper will explore how business as mission (BAM) businesses can do 'that,' being the stewards of God's creation through the creative agency of business. We will focus on two aspects, the provision of clean water and clean air in some of the most least-served parts of the planet.

The Challenge

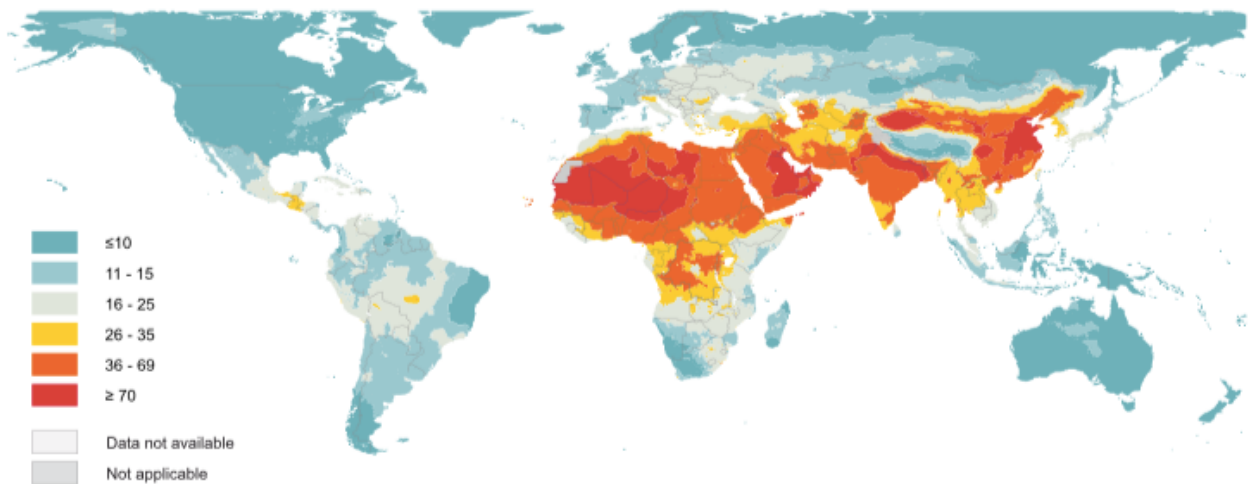
The worldwide environmental challenges we face are well documented⁹. At the same time, the people we want to reach with the gospel message are often the ones facing the greatest environmental, even existential challenges.

Since business as mission aims to bring positive impact on all four 'bottom lines'—economic, social, environmental and spiritual—BAM models are able to have a uniquely holistic missional approach.

⁹ A good introduction on 'Creation Care and the Workplace' from a Christian perspective can be found here: <https://lausanne.org/content/creation-care-workplace>

In this paper, we will highlight two particular issues, the provision of clean water and clean air, because they typify the kinds of environmental challenges that BAM companies are well-placed to address—alongside social, spiritual and economic challenges. The three maps below summarise the issue and opportunity.

The first map shows the distribution of fine particulate matter around the world. The deeper the red colour, the higher the health risk (World Health Organization, 2016).



PM_{2.5} : Fine particulate matter of 2.5 microns or less.

Figure 2: Fine particulate matter of 2.5 microns or less. (WHO, 2016)

The second map shows the level of lack of access to water of sufficient quality and quantity (Hofste, Reig, & Schleifer, 2019).

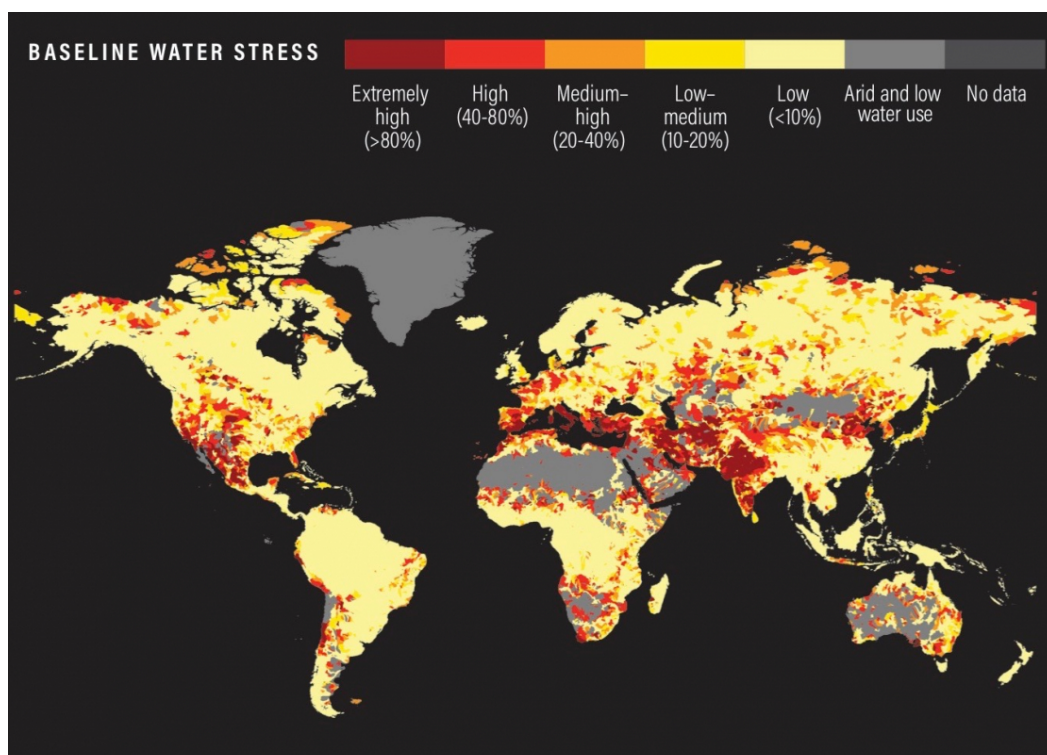


Figure 3: Degree of Water Stress (Hofste, Reig, & Schleifer, 2019)

The third map shows the progress of the gospel among all people groups (Joshua Project, 2020), red showing the least reached groups.

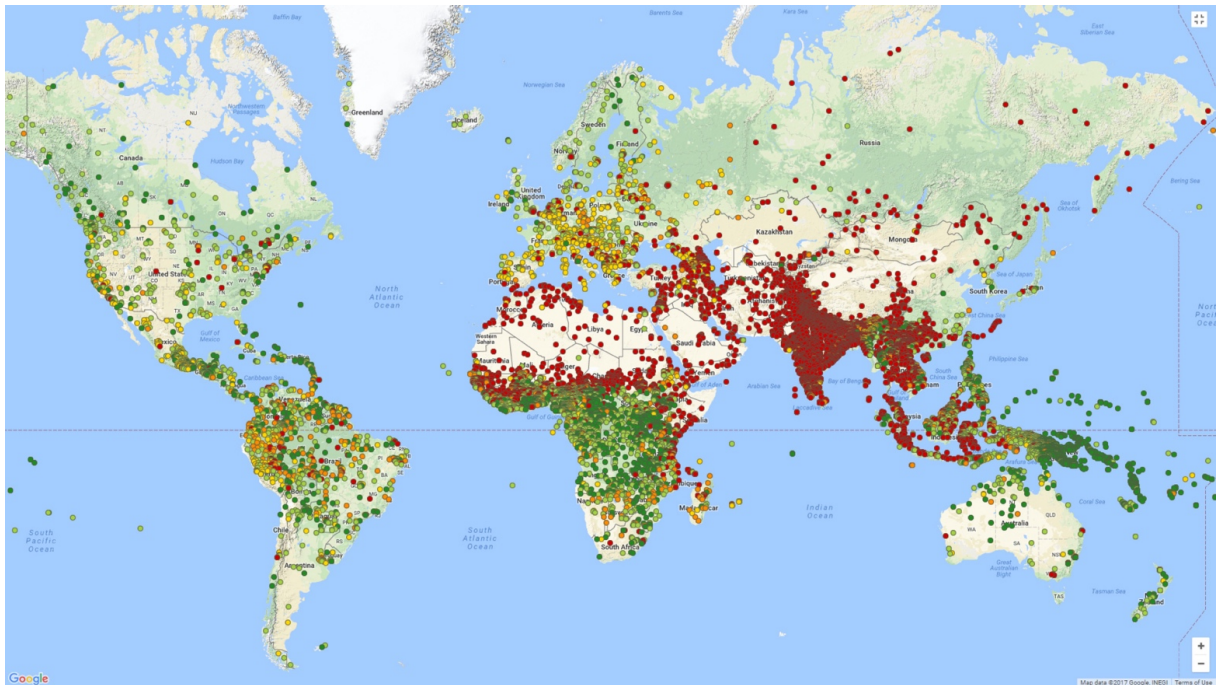


Figure 4: Progress of the Gospel among all people groups (Joshua Project, 2020)

The overlap is remarkable. Those precious people who need to hear the Good News are, in large part, facing the worst air quality and maximum water stress. Figures 5,6 and 7 and Tables 1 and 2 below provide more qualitative detail where environmental stressors and unreached people groups converge. These represent areas where BAM companies and missional organisations can apply their air and water solutions in places where these groups reside. Please note that while our tables and maps show the highest intersections, local nodes in other countries may also benefit from air and water solutions. Appendices 1 and 2 provide more detailed rankings for environmental stressors.

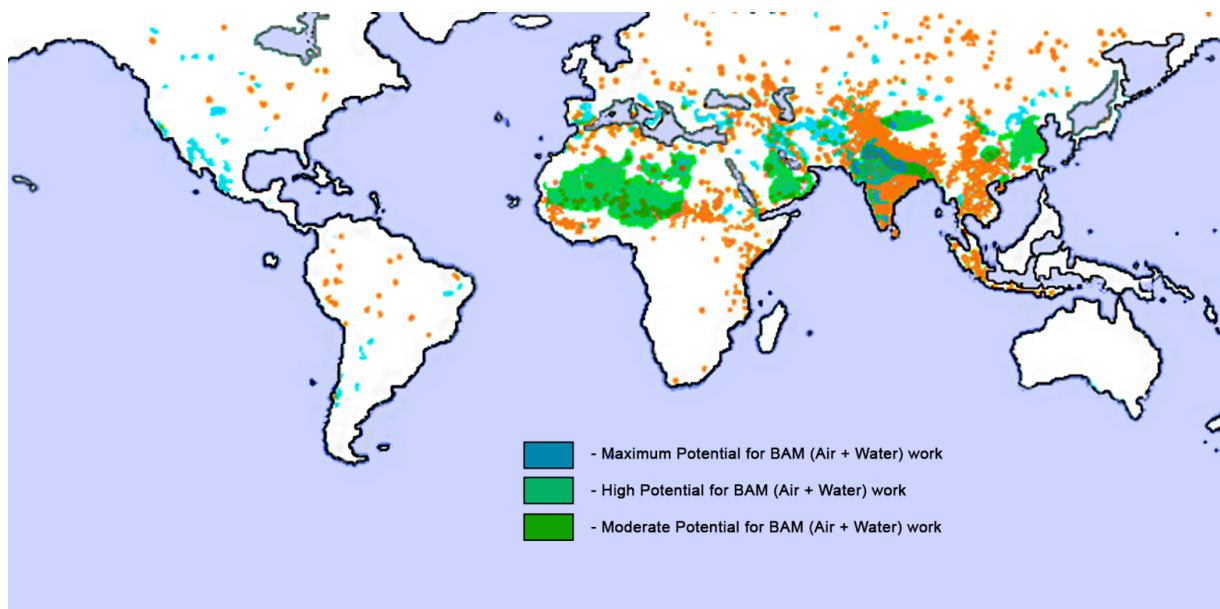


Figure 5: Highest potential for BAM air and water solutions to unreached peoples

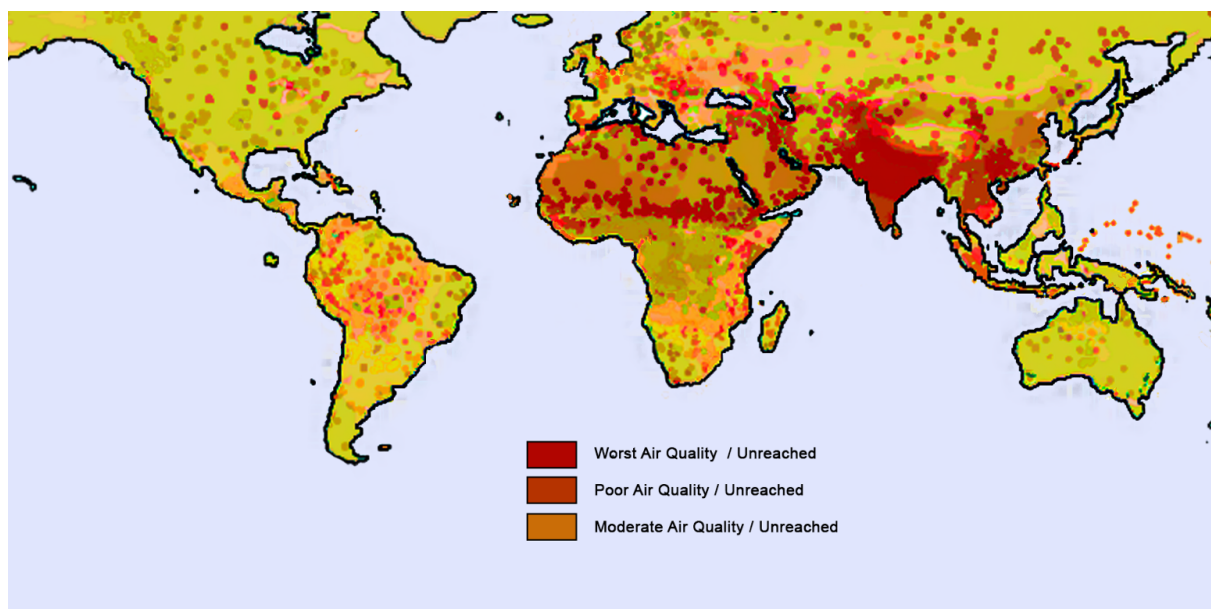


Figure 6: Graded potential for BAM air solutions to unreached peoples

Ranking	Name of country
1	Bangladesh
2	Pakistan
3	India
4	Mongolia
5	Afghanistan
6	Kyrgyzstan
7	Indonesia
8	Nepal
9	Mali
10	China
11	Tajikistan
12	Myanmar
13	Vietnam
14	Iran
15	Saudi Arabia
16	Laos
17	Kazakhstan
18	Thailand
19	Cambodia
20	Algeria

Table 1: Top countries with converging poor air quality and unreached people groups

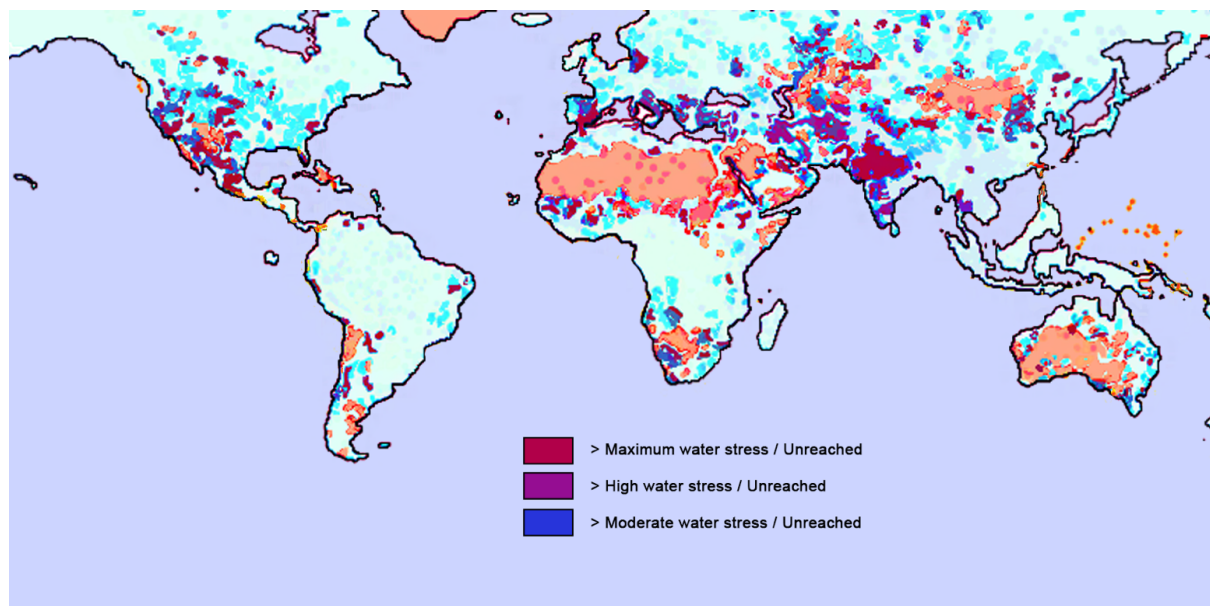


Figure 7: Graded potential for BAM water solutions to unreached peoples

Ranking	Name of country
1	Iran
2	Jordan
3	Libya
4	Saudi Arabia
5	Eritrea
6	United Arab Emirates
7	India
8	Pakistan
9	Turkmenistan
10	Morocco
11	Mexico
12	Uzbekistan
13	Afghanistan
14	Spain
15	Syria
16	Turkey
17	Namibia
18	Kyrgyzstan
19	Nepal
20	Iraq

Table 2: Top countries with converging high water stress and unreached people groups

In a 2019 study done on a Central Asian city, not one clean air day was recorded in the period of the nine-month study. Both India and Pakistan have extremely high baseline water stress (Hofste, Reig, & Schleifer, 2019). The Indus Valley (Punjab) is one of the largest regions of agricultural production in both India and Pakistan, where a large part of the crops relies on irrigation. The economic disruption of reduced water access will be profound. As Dr. Sujatha Moses (Moses, 2021) stated in the BAM Global Webinar on BAM and Creation Care in March 2021, asthma and chronic bronchitis caused by air pollution, and water-borne typhoid and cholera are preventable.

The Hope

BAM businesses may be one of the best vehicles to address these environmental challenges and allow the people we want to reach to flourish. There is hope, and that hope is, in good measure, coming with what God is doing through business as mission.

While conventional capitalism is struggling for meaning in a post-Friedman world where it is no longer acceptable to just bring value to shareholders (Roche & Jakubs, 2017), we in the BAM community have been longer on the journey to rediscovering God's good design for business.

We bring business solutions that align with God's **purpose**, including spreading the Good News of Jesus Christ. We do this while blessing **people**, especially by providing jobs, which lead to greater social stability. We do this while making a **profit**, so that our business is sustainable and credible, providing even more social stability. And we protect the **planet**, we all work in the 'garden' that God gave us to steward (Genesis 2:15).

While not everything that exists was made useful for man (Ramachandra, 2016) (Bookless, 2019), God gave us everything we need for business. Carl Sagan's quote, 'If you want to make an apple pie from scratch, you must first invent the universe' says it well (Sagan, Druyan, & Soter, 1980). The Lord knew what you needed for your business when he created the universe.

Business as mission entities are often established in areas that have the worst economic background (labour capital), worst air quality and worst water quality or quantity (natural capital). BAM practitioners work in areas where people may be disproportionately hungry, thirsty and sick (affected by pollution), and we can respond to Jesus' exhortation to respond (Matthew 25:35,36). In short, BAM is already on the ground where these solutions are needed most.

Missional organisations have led in the fields of medicine and education in the past. It is time now to add environmental mission, for the people we are trying to reach are facing the most challenging environmental issues of lack of clean water, bad air, food insecurity and energy insecurity.

We believe that BAM and missional organisations are one of the best examples of Convergent Innovation. Convergent Innovation integrates the capabilities and goals of different actors in society in order to meet the great challenges (McGill Centre for the Convergence of Health and Economics, 2021).

The Response

We all need to bring our 'loaves and fishes' to supply the nearly eight billion people on our planet with clean air and water *and* make sure all have the opportunity to hear the gospel. It will take all of our combined capacity to help meet our greatest environmental challenges. The good news is that God is at work and he is stirring us in the business as mission community to be part of his solution. BAM Global has identified this potential in two of its three 'Big Hairy Audacious Goals'¹⁰ for BAM; aiming to multiply business as mission solutions and impact in response to the world's most pressing issues.

The need in terms of pressing environmental issues stretches over all continents, and more work needs to be done to understand local needs of clean energy, clean water and clean air, among other challenges.

A key response required now for the BAM community is to mature and mobilise new companies and technologies that can address these environment challenges. This will involve removing the development and capital constraints that hinder their establishment and finding the right places where these technologies can be deployed.

We are all on this team. Some of you reading this report will bring financial skills. Others of you have intimate knowledge of the local needs. This is incredibly important. Because while the challenge covers much of the unreached world, and the solutions come from all over the world, the solutions must be locally driven to meet local needs. Others of you are building robust, innovative technologies that can run and be maintained anywhere. And many of you are bringing strong business and gospel skills to complete the team. We still need technical assessors to help convince investors the BAM technologies will work, and we encourage the BAM investment funds to establish clean technology (cleantech) arms. There is an opportunity in this virtuous supply chain where your greatest gift can meet the world's greatest needs.

And as is often the case, we believe the Holy Spirit is way ahead of us and innovators have already been responding to his lead. There are BAM energy audit firms in North America, plastics recycling in Nepal, safe toilets in India, sustainable energy projects in the Netherlands and Scotland, biodigesters in Canada, water treatment in Pakistan, water purifiers in Indonesia and Turkey, and waste-to-energy projects in Canada and Australia, among others. All of these projects are being developed so that they can be moved into areas with the greatest need by like-minded individuals and companies.

Conclusion

It will take all of our combined capacity to help meet our pressing environmental challenges. The good news is, God has already at work and he has given us the tools, resources and this movement of the Holy Spirit called business as mission as part of his solution. The world needs you.

The recommendation and action plans below propose a way forward.

¹⁰ See: <https://www.bamglobal.org/wp-content/uploads/2019/10/BAM-Global-BHAGs.pdf>

Recommendations and Action Plan

Recommendations

1. In order to fit the correct clean tech solution to the correct challenge, we need to survey the like-minded technology companies to see what their impediments are to bring their technology to market.
2. We need to do local needs analysis. Local mission and social NGO's are perfectly placed to carry out this work and report back with identified needs.
3. Develop a technology forum where technology developers, their clients in the regions they want to serve, investors and technical specialists can meet and find solutions.
4. Set up an early-investment cleantech¹¹ investment fund that will bring technical review, rigour and legitimacy to good ideas so that more mature funds not familiar to the cleantech space would have comfort in providing further investment.
5. Develop a technical-financial assessment method to monitor cleantech deployment in the BAM space.

Action Plan

The numbers below refer to the specific numbered point in the Recommendations above.

- (1) Develop Survey of like-minded technology companies to determine what impediments they have in serving the BAM market.
- (2) Find local agencies (missional and otherwise) to identify local needs for clean water, clean air and clean energy.
- (2) Continue to develop links between BAM practitioners and missional agencies to promote environmental mission and convergent innovation.
- (3) Establish a technology forum.
- (4,5) Establish a cleantech investment fund capable of assessing new technologies and providing early-stage investment.

¹¹ Clean technology, in short cleantech, is any process, product, or service that reduces negative environmental impacts through significant energy efficiency improvements, the sustainable use of resources, or environmental protection activities, see: https://en.wikipedia.org/wiki/Clean_technology

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Appendices

Appendix 1 – WRI National Water Stress Rankings

 WORLD RESOURCES INSTITUTE National Water Stress Rankings			
EXTREMELY HIGH BASELINE WATER STRESS			
1. Qatar	6. Libya	10. United Arab Emirates	14. Pakistan
2. Israel	7. Kuwait	11. San Marino	15. Turkmenistan
3. Lebanon	8. Saudi Arabia	12. Bahrain	16. Oman
4. Iran	9. Eritrea	13. India	17. Botswana
5. Jordan			
HIGH BASELINE WATER STRESS			
18. Chile	25. Uzbekistan	32. Turkey	39. Niger
19. Cyprus	26. Greece	33. Albania	40. Nepal
20. Yemen	27. Afghanistan	34. Armenia	41. Portugal
21. Andorra	28. Spain	35. Burkina Faso	42. Iraq
22. Morocco	29. Algeria	36. Djibouti	43. Egypt
23. Belgium	30. Tunisia	37. Namibia	44. Italy
24. Mexico	31. Syria	38. Kyrgyzstan	
MEDIUM-HIGH BASELINE WATER STRESS			
45. Thailand	51. Tajikistan	57. Guatemala	63. Lesotho
46. Azerbaijan	52. Macedonia	58. Estonia	64. Denmark
47. Sudan	53. South Korea	59. France	65. Indonesia
48. South Africa	54. Bulgaria	60. Kazakhstan	66. Peru
49. Luxembourg	55. Mongolia	61. Mauritania	67. Venezuela
50. Australia	56. China	62. Germany	68. Cuba
LOW-MEDIUM BASELINE WATER STRESS			
69. North Korea	77. Sri Lanka	85. Ukraine	93. Czech Republic
70. Romania	78. El Salvador	86. Poland	94. Russia
71. United States	79. Tanzania	87. Chad	95. Bolivia
72. Zimbabwe	80. Netherlands	88. Senegal	96. Ethiopia
73. Dominican Republic	81. Ecuador	89. United Kingdom	97. Bosnia and Herzegovina
74. Haiti	82. Lithuania	90. Georgia	98. Swaziland
75. Japan	83. Philippines	91. Nigeria	99. Moldova
76. Angola	84. South Sudan	92. Argentina	100. Somalia
LOW BASELINE WATER STRESS			
101. Rwanda	118. Colombia	135. Uganda	150. Paraguay
102. Liechtenstein	119. Myanmar	136. Panama	151. Uruguay
103. Guinea-Bissau	120. Belize	137. Nicaragua	152. Togo
104. Mozambique	121. Montenegro	138. Guinea	153. Norway
105. Vietnam	122. Malawi	139. Benin	154. Republic of Congo
106. Kenya	123. Mali	140. Croatia	155. Bhutan
107. Costa Rica	124. Finland	141. Papua New Guinea	156. Timor-Leste
108. Canada	125. Slovakia	142. New Zealand	157. Brunei
109. Serbia	126. Ireland	143. Democratic Republic of the Congo	158. Gabon
110. Zambia	127. Sweden	144. Côte d'Ivoire	159. Equatorial Guinea
111. Switzerland	128. Bangladesh	145. Cameroon	160. Guyana
112. Brazil	129. Cambodia	146. Gambia	161. Iceland
113. Hungary	130. Burundi	147. Laos	162. Jamaica
114. Ghana	131. Latvia	148. Central African Republic	163. Liberia
115. Belarus	132. Malaysia	149. Sierra Leone	164. Suriname
116. Madagascar	133. Honduras		
117. Slovenia	134. Austria		

Note: This is based on UN member countries. Palestine is a non-member observer and would place between Lebanon and Iran. Some small island nations could not be added to the rankings because of limitations of the model. Scores for these countries are available separately.

Source: wri.org/aqueduct

Appendix 2 – IQAir World Capital City Air Quality Ranking 2020



Which are world's most polluted capitals according to World Air Quality Report?

India's capital Delhi is the world's most polluted capital city with an average annual concentration of PM2.5 in a cubic metre of air at 84.1, according to World Air Quality Report 2020 by Swiss organisation IQAir. It's followed by Bangladesh's Dhaka, Mongolia's Ulaanbaatar, Afghanistan's Kabul, and Qatar's Doha. Delhi's air quality improved by 15% compared to 2019, the report said.

short by Pragya Swastik / 16 Mar, 2021

