



Analog to Digital – A SMART Campaign for Media and Information Literate Policy Planning: An Examination of the Jamaica Policy Planning Framework

Presented by: Paulette Kerr PhD. The University of the West Indies, Mona

Presentation Overview

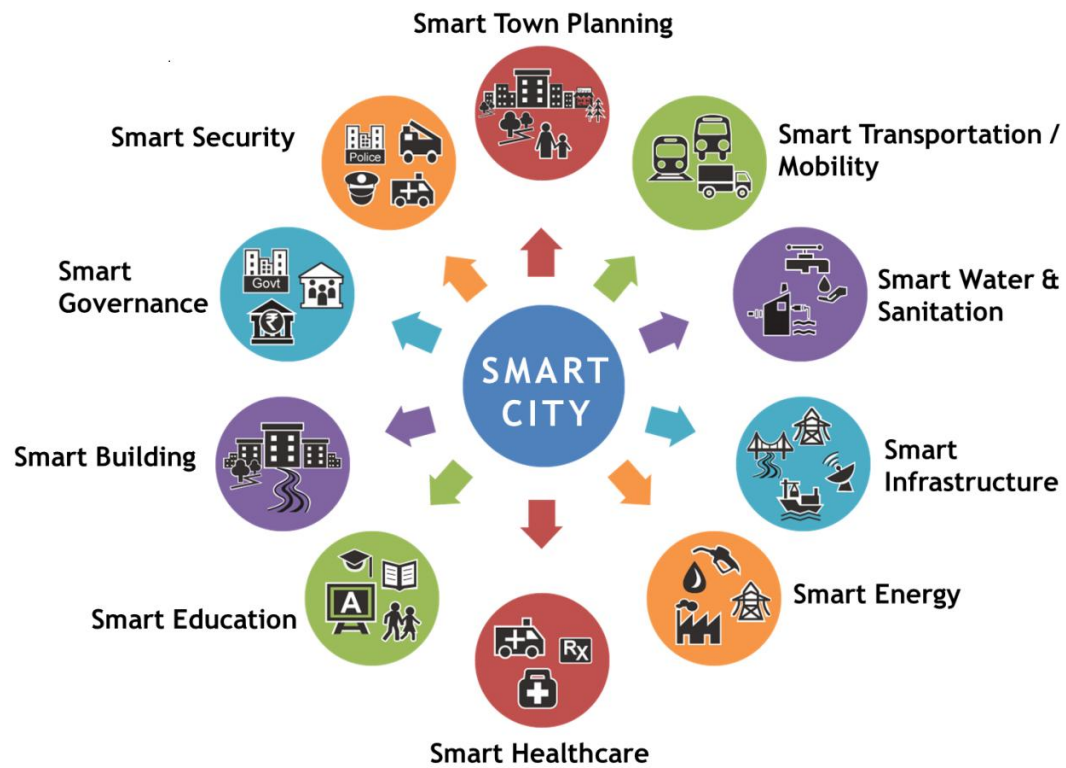
- Defining Smart Cities
- Framework for Building Smart Cities
- An Examination of the Vision 2030 Jamaica National Development Plan as a Platform for Building Smart Cities
 - Overview of the Plan
 - Gaps in the Plan
- The Role of MIL
- Conclusion

Defining A SMART City

- A smart city is one that achieves sustainable development & natural resource management, economic growth and improved quality of life for its citizens and fosters active participation by its citizenry in governance of the society through the incorporation of ICT into its systems and structures to meet the needs of its citizenry through sustainable, user-focused service provision.

SOURCE: (Albino, et al., 2015; Ramaprasad, et al., 2017;
Austrian Technical University of Applied Science, n.d.)

Smart City – Key Components



Building a SMART City

Smart Cities:

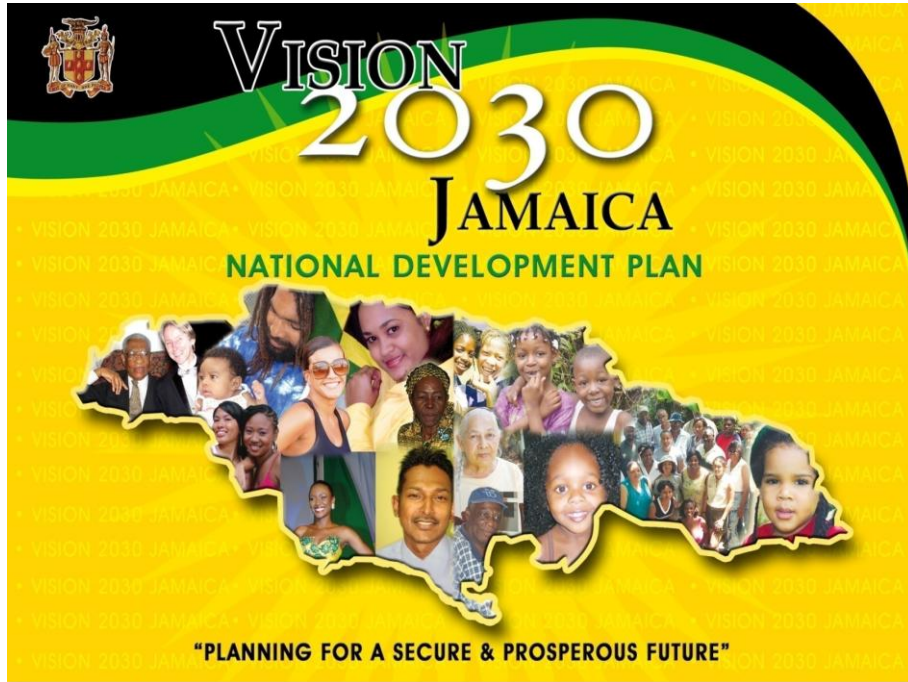
- are built in the context of a *global society* in the *digital age*
- require a policy framework
- must be planned

“It takes more than individual projects but careful decisions on long-term implementations”, (Austrian Technical University of Applied Science, n.d.)

SOURCE:

<https://pdfs.semanticscholar.org/656e/4fb0564d96407161d9e541a9ca15375d6c60.pdf>

Overview – Vision 2030 Jamaica National Development Plan



Smart Cities are key components of a Developed Nation

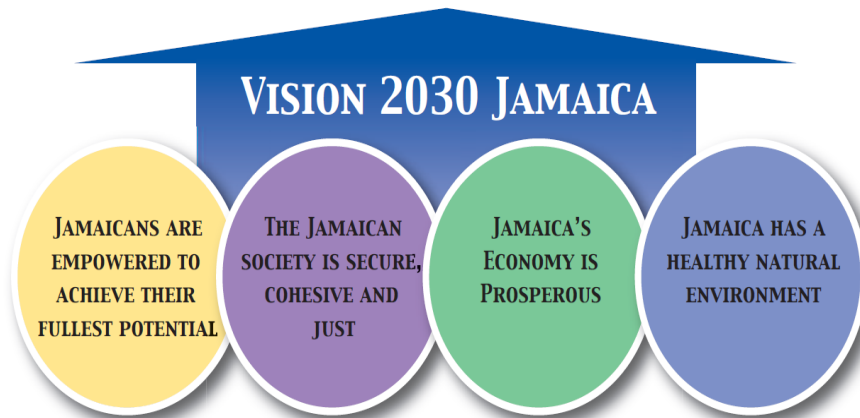
National Development Plan as:

- Platform for achieving Developed Nation Status
- Policy Framework for building Smart cities

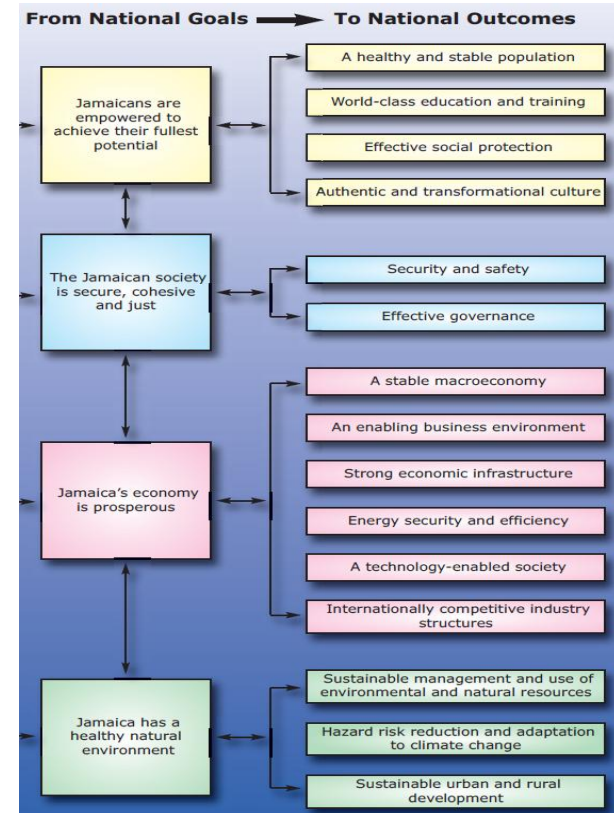
Overview – Vision 2030 Jamaica National Development Plan



Four (4) National Goals



"JAMAICA, THE PLACE OF CHOICE TO LIVE, WORK, RAISE FAMILIES AND DO BUSINESS"



Overview – Vision 2030 Jamaica National Development Plan



Implementing Vision 2030 Jamaica: Medium Term Socio–Economic Policy Framework (MTF)

- **Main Mechanism to Operationalize the Implementation of Vision 2030 Jamaica**
- **Three –Year Package of Priority Outcomes, Strategies, Actions and Programmes**
- **Three MTFs have been developed to date: 2009 – 2012, 2012 – 2015, 2015 - 2018**



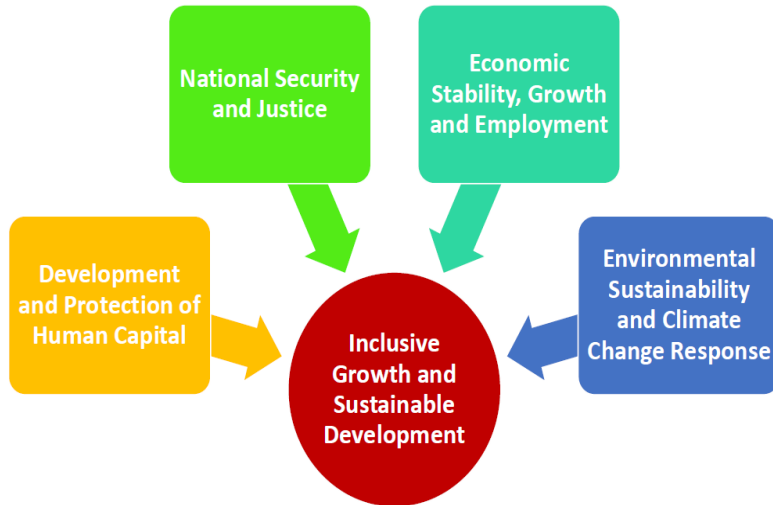
**MEDIUM TERM SOCIO-ECONOMIC
POLICY FRAMEWORK 2015 - 2018**
Achieving Inclusive Growth and Sustainable Development



Overview – Vision 2030 Jamaica National Development Plan

MTF 2015 – 2018: Achieving Inclusive Growth and Sustainable Development

JAMAICA VISION 2030 - NATIONAL DEVELOPMENT
ALIGNMENT WITH THE
SUSTAINABLE DEVELOPMENT GOALS



The Relationship between MIL Policy Planning and Building Smart Cities

- The 2018 Sustainable Development Goals Report declares that there is a “data revolution in motion,” (UNSTAT, 2018, pg.1).
- Need for more robust national data systems.
- Global metadata network is vital to tracking development progress.

The Relationship between MIL Policy Planning and Building Smart Cities

- The ability to create, store, retrieve, interpret and critically utilize data are key MIL competencies
- Robust and efficiently managed data rely on MIL competencies at all stages and levels of data production and management
- The DATA REVOLUTION demands a MIL competent society
- Smart Cities are the home of effective governance
- Smart cities require smart actors to effectively carry out city functions

National Development Plan as Basis for Smart City Planning

- The vision 2030 national development plans of member states are therefore aligned with the sustainable development agenda
- The sustainable development agenda is predicated on the incorporation and use of MIL
- MIL competencies must drive sustainable national development and active, meaningful participation in governance by the populace (UNSTAT, 2018)
- MIL is vital to the making of Smart cities



National Development Plan as Basis for Smart City Planning

Jamaica's SDG Roadmap –

- A guide to the Vision 2030 National Development Plan implementation
- A tool for examination of the Plan's inclusion of MIL in development planning
- A basis for assessment of the national policy framework for building Smart Cities

Gaps in the Plan

The SDG Agenda – Foci for
Action:

- Planet
- People
- Prosperity

N.B. - The notion of *partnership*
undergirds all focal areas

Development Planning – Key
Issues for Policy:

- Sustainability
- Inclusivity
- Sustainable Development
Cities

Gaps in the Plan - Sustainability

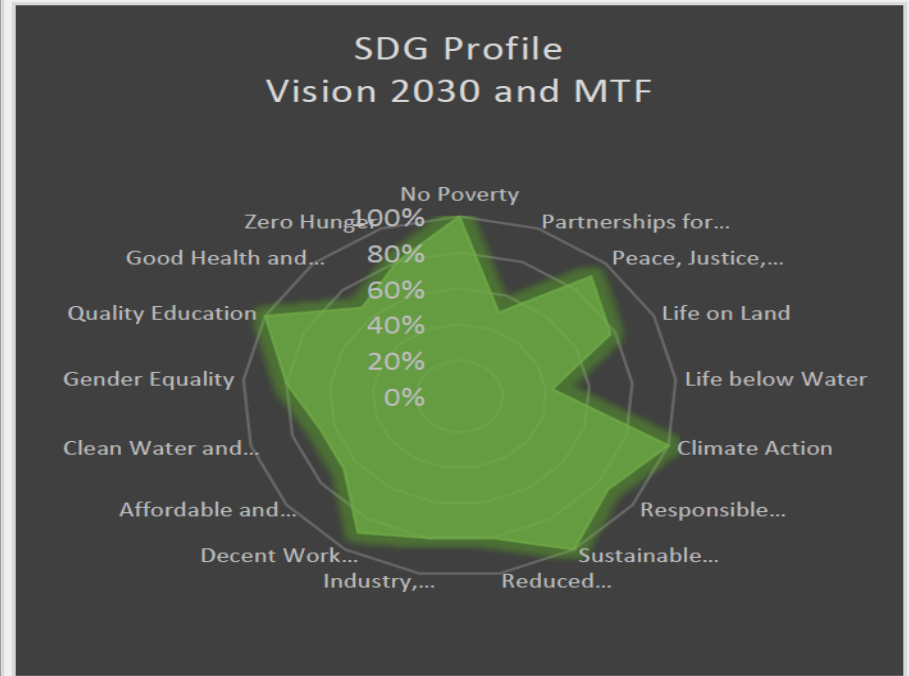
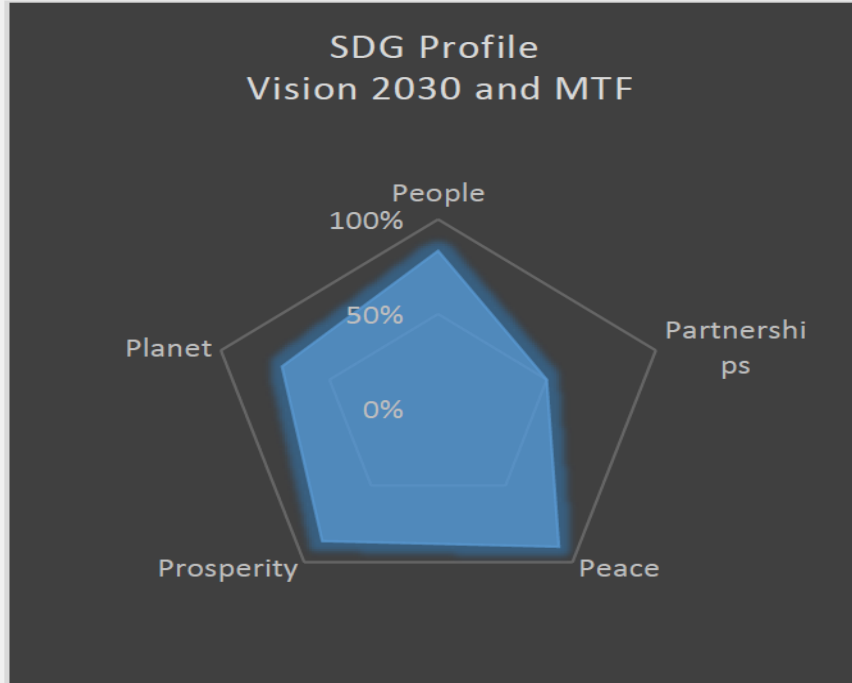
SDG Focus for Action – Planet

- Jamaica is still 90% dependent on fossil fuel; renewable energy penetration is 12%
- Environmental pollution is a major challenge
- Absence of SDG equivalent targets in relation to citizen education on sustainable production and consumption
- Plan lacks SDG equivalent language in relation to conservation, protection and sustainable use of natural resources

Gaps in the Plan - Sustainability

SDG Focus for Action – Planet (Cont'd.)

Figure 1. Alignment of Vision 2030 Jamaica and the Medium-Term Socio-Economic Policy Framework 2015–2018 with the SDGs

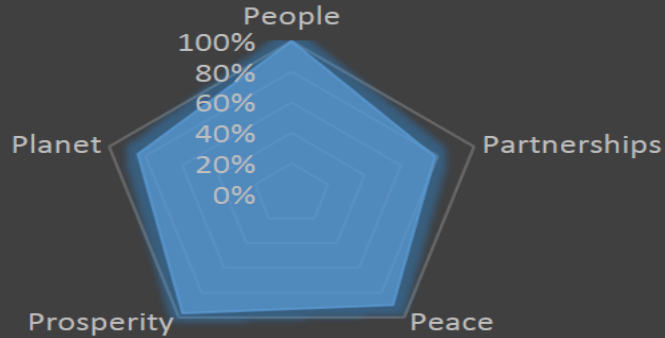


Gaps in the Plan - Sustainability

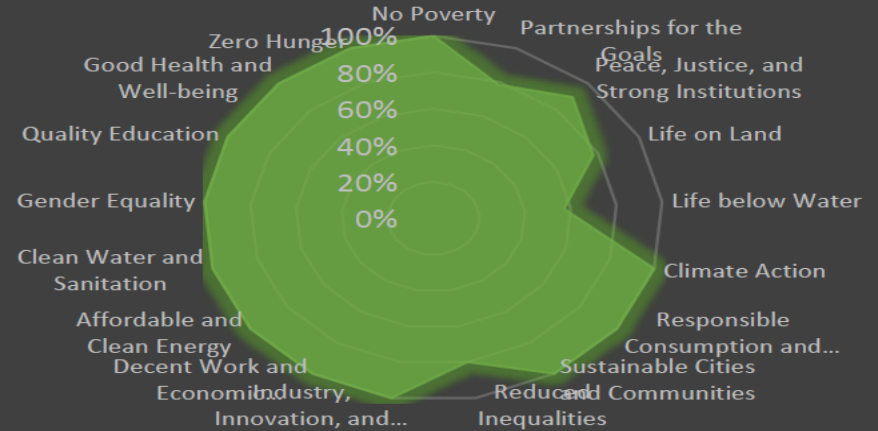
SDG Focus for Action – Planet (Cont'd.)

Figure 2. Alignment of all planning documents analysed with the SDGs

SDG Profile - All Planning Documents



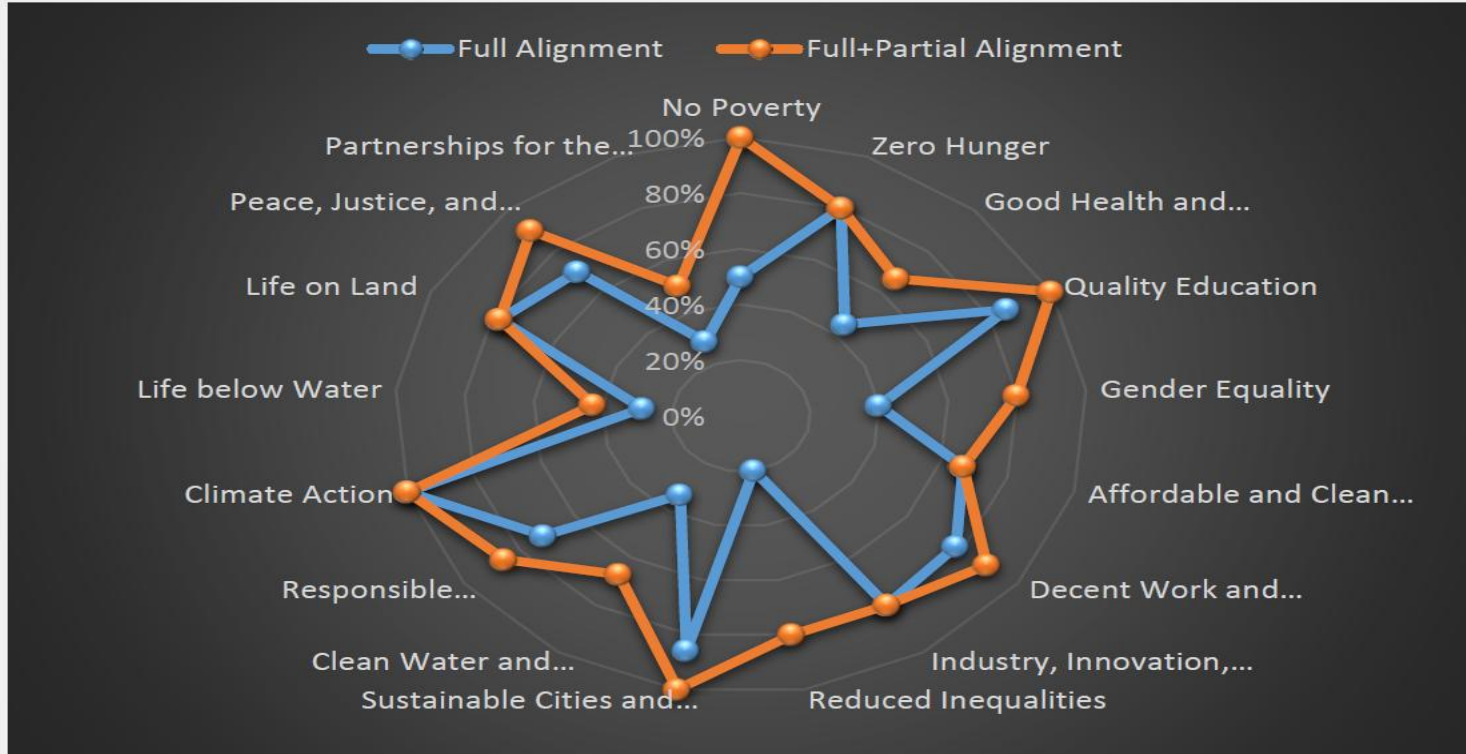
SDG Profile - All Planning Documents



Gaps in the Plan - Sustainability

SDG Focus for Action – Planet (Cont'd.)

Figure 3. Fully aligned vs. full and partially aligned SDG targets



Implications for Development

- Tourism is a major contributor to GDP (World Travel and Tourism Council, 2017)
- Fisheries is an important livelihood for a segment of the national labour force (PIOJ, 2017)
- Dependence on non-renewable energy sources, unsustainable natural resource management result in extremely high production costs, making it difficult for Jamaica to compete in the global market economy
- Unsustainable production and consumption patterns increase impact negatively on the balance of payments deficit making it more difficult to have a prosperous economy

Critical Questions - Sustainability

- How can such practices be stemmed? How can we curb the appetite of citizens or change the behavior of persons?
- Do perpetrators have a true appreciation of the long-term environmental impact?
- Is there consideration of the possible health risks?
- Who are the actors by, through and to whom information regarding sustainability should be created, disseminated and directed respectively?
- What other measures should be instituted to ensure knowledge translates to practice?

The Role of ML in Bridging the Sustainability Gaps

- Sustainable natural resource management and use must be data driven
- Data must be current and data collection must be ongoing
- Data should inform sustainable development planning
- Data should foster critical thinking
- Data should be translated in ways that challenge unsustainable practices

The Role of MIL in Bridging the Sustainability Gaps

- The incorporation of MIL competencies in data gathering as well as in information transmission and dissemination is crucial to enabling the citizenry to see the link between a stable and healthy natural environment and a prosperous economy
- Availability and accessibility of information on sustainable natural resource use and management is vital for informed decision-making
- MIL serves as a useful tool for sustainable development planning and public education on sustainable living

Gaps in the Plan – Social Inclusivity

SDG Focus for Action – Partnership

- In regard to [SDG 17] – To **Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development**, “only 50.0 per cent of relevant targets aligned,” (PIOJ, 2017, pg. 17).
- Weak or limited collaboration on the ground, among stakeholders in regard to implementation of the Plan
- The Plan does not include stakeholders at the local (grass-root) level in decision-making re the national sustainable development policy agenda

Gaps in the Plan – Social Inclusivity

SDG Focus for Action – Partnership (Cont'd.)

- Under the Technology aspects of Goal 17, there is an absence of language on Target 17.6: *promoting cooperation on and access to science and technology and innovation* and Target 17.8: *enhance the use of enabling technology* among others

Implications for Development

SDG Focus for Action – Partnership (Cont'd.)

- ‘Buy-in’ is critical for sustainable development
- National internet penetration doubled from 21.1% in 2007 to 43.4% as at July 2016 (internetlivestats.com)
- Students lack the requisite knowledge and skills to critically engage the information available to them (Kerr, Stewart, Heath, Baker-Gardener, Wu and Rodney-Wellington, In Press)

Implications for Development

SDG Focus for Action – Partnership (Cont'd.)

- Youth are expected to be the engine of national development and the “link between technological awareness and access... [which] is critical” in determining “...the extent to which young people are aware of the diverse opportunities the internet can provide in making their lives and their country better.” (PIOJ, 2007, pg.4)

Critical Questions – Social Inclusivity

- Who will galvanize civil society?
- How will their inclusion and participation be assured?
- How can we reduce the disparity between internet accessibility and competence in its use for development?

The Role of MIL in Bridging the Social Inclusivity Gaps

- Accountability through social inclusion
- It takes a MIL competent citizenry to shape a Smart city
- Consultation for implementation of Smart city plans must encompass MIL practitioners and professionals
- MIL education must be regarded as central to building of a Smart city
- The notion of inclusivity is embedded in Smart cities and a MIL competent citizenry is better poised to engage in the dialogue surrounding governance that will facilitate inclusion of all.

Gaps in the Plan – Sustainable Cities

SDG Focus for Action – People

- The gap identified in relation to [SDG 11] - **Make cities and human settlements inclusive, safe, resilient and sustainable** concerns Target 11.7 on *providing universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities* which is without equivalent language in Vision 2030 Plan and the MTF.

Implications for Development

- The focus of the most recent MTF is achieving inclusive growth and sustainable development, (PIOJ, 2016)
- Sustainability is vital to well-being
- The provision of sufficient ‘green spaces’ within the city and access to such spaces by the city’s residents is vital in maintaining optimal health and well-being (Groenewegen, et al., 2006; Carrus, et al., 2015 and Sandifer, et al., 2015).
- Safety and security are critical to well-being and productivity

The Link between a Sustainable City and a SMART City

- Smart cities are an inherent part of developed nation-states
- A Smart city is a sustainable city
- Sustainable cities are smart, safe and green
- Sustainable cities invest in human capital

“Smart cities of the future will need sustainable urban development policies where all residents, including the poor, can live well and the attractions of towns and cities is preserved. [...] Smart cities are [...] cities that have a high quality of life; those that pursue sustainable economic development through investments in human and social capital [...]. [...] Smart cities should also be sustainable, converging economic, social and environmental goals”, (Thuzar, 2011,pg.1728 in Albino, et al., 2015).

The Role of MIL in Bridging the Gaps – Building Sustainable Cities

- The investment in human and social capital through protection and preservation of the natural and social environments is a matter for MIL
- Smart City planning requires a complex and diverse mass of expertise and data from multiple actors in different spheres
- Such a feat requires full engagement and use of MIL competencies in seeking, obtaining, evaluating, creating and disseminating information among and between planners while fostering active participation by the citizenry and dialogue between the citizenry and planners at all levels

Conclusion

- A developed nation is not only technologically advanced, it also knowledge-based. It's a society whose citizens possess the required information and knowledge to engage in critical thinking and make informed (wise) decisions that promote well-being and high quality of life for all.
- The absence of key aspects of the SDG 2030 Agenda in the Vision 2030 Jamaica National Development Plan highlights the need for MIL policy planning to assist with closing the gaps identified. It underscores the need for MIL in the planning of a Smart city.

Conclusion

- A Smart city is a knowledge-based one founded on a MIL competent society in which freedom of information, access to information, public participation, government accountability, diversity, inclusivity, inter-cultural dialogue, the right to privacy, media plurality, gender equality and MIL co-exist.
- A MIL society produces a MIL city; A MIL city inevitably leads to the shaping of a Smart city.
- The inextricable link between a MIL city and a Smart city is undeniable.

Works Cited

- Albino, Vito, Berardi, Umberto and Dangelico, Rosa Maria, 2015, “Smart Cities: Dimensions, Definitions and Performance”. Retrieved from: <https://pdfs.semanticscholar.org/656e/4fb0564d96407161d9e541a9ca15375d6c60.pdf>
- Austrian Technical University of Applied Science, n.d., “What is A Smart City?” Retrieved from: <https://www.wien.gv.at/stadtentwicklung/studien/pdf/b008403j.pdf>
- Carrus, G., Scopelliti, M., Laforteza, R., Colangelo, G., Ferrini, F., Slabitano, F., Agrimi, M., Porotghesi, L., Semenzato, P. and Sanesi, G., 2015, “Go greener, feel better? The positive effects of biodiversity on the well-being of individuals visiting urban and peri-urban green areas”. *Landscape and Urban Planning*, 134, (pp 221-228). Retrieved from: <https://www.sciencedirect.com/science/article/pii/S0169204614002552>₃₅

Works Cited

- Food and Agriculture Organization of the United Nations [FAO], 2016, “The 2030 Agenda for Sustainable Development: Goals, Targets and Indicators”. Retrieved from: <http://www.fao.org/3/a-bc965e.pdf>
- Groenewegen, P. P., van den Berg, A., de Vries, S. and Verheij, R. A., 2006, “Vitamin G: Effects of green space on health, well-being and social safety”. *BMC Public Health*. Retrieved from: <https://bmcpublichealth.biomedcentral.com/track/pdf/10.1186/1471-2458-6-149>
- Internet Live Stats, 2018, “Jamaica Internet Users”. Accessed on July 16, 2018 from: <http://www.internetlivestats.com/internet-users/jamaica/>
- Kerr, P., Stewart, P., Heath, R., Baker-Gardener, R., Wu, Y. and Rodney-Wellington, K., In Press), “Media and Information Literacy Levels at the Exit Stages of the Education System in Jamaican Schools: A Survey”.

Works Cited

- Lorenc, T., Clayton, S., Neary, D., Whitehead, M., Peticrew, M., Thomson, H., Cummins, S., Sowden, A. and Renton, A., 2012, “Crime, fear of crime, environment, and mental health and wellbeing: Mapping review of theories and causal pathways”. *Health and Place*, 18(4), pp. 757-765. Retrieved from:
<https://www.sciencedirect.com/science/article/abs/pii/S1353829212000639>
- Planning Institute of Jamaica [PIOJ], 2007, “Internet use among young people in the Kingston Metropolitan Area”. Retrieved from:
https://www.pioj.gov.jm/portals/0/sustainable_development/internet%20use%20in%20the%20kma.pdf

Works Cited

- Planning Institute of Jamaica [PIOJ], 2011, “Vision 2030 Jamaica National Development Plan: A Strategic Framework for Balancing National Development and the Environment”. Retrieved from:
http://www.jiep.org/drupal/sites/default/files/Conference_Presentations/Day%201/Richards%20A%20-%20Presentation%20JIEP%20Conf%202011.pdf
- Planning Institute of Jamaica [PIOJ], 2016, “Vision 2030 Jamaica National Development Plan: Planning for a secure and prosperous future”. Retrieved from:
<https://www.cepal.org/sites/default/files/events/files/sii-seminadpalccaso-expyvisiones2030-casojamaica-24-11-16.pdf>

Works Cited

- Planning Institute of Jamaica [PIOJ], 2017, “A road map for SDG implementation in Jamaica” Accessed on July 16, 2018 from: <http://statinja.gov.jm/pdf/JamaicaSDGRoadmap.pdf>
- Planning Institute of Jamaica [PIOJ], 2017, “Economic and Social Survey of Jamaica: Selected Indicators”. Retrieved from: <https://webstore.pioj.gov.jm/images/PreviewDocument/20272.pdf>
- Ramaprasad, Arkalgud, Sánchez-Ortiz, Aurora and Thant, Syn, 2017. “A Unified Definition of A Smart City”. <https://www.springer.com/cda/content/document/cda.../9783319646763-c2.pdf?>

Works Cited

- Sandifer, P.A., Sutton-Grier, A.E. and Ward, B.P., 2015, “Exploring connections among nature, biodiversity, ecosystem services, and human health and well-being: Opportunities to enhance health and biodiversity conservation”. Retrieved from: https://ac.els-cdn.com/S2212041614001648/1-s2.0-S2212041614001648-main.pdf?_tid=54074947-7c44-4d55-9e7f-72bad6e5394f&acdnat=1539872706_2bcbc4619f31248449c6f96f9e76730_c
- United Nations [UN], 2015, “Transforming Our World; The 2030 Agenda for Sustainable Development”. Retrieved from: <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>

Works Cited

- United Nations Development Programme [UNDP], 2016, “Sustainable Development Goals”. Retrieved from:
file:///C:/Users/Nicole/Desktop/Files/RESTART/Res.%20Asst._Campus%20Lib/MILID/SDGs_Booklet_Web_En.pdf
- United Nations Development Programme [UNDP], 2018, “Summary – Human Development Indices and Indicators: 2018 Statistical Update”. Retrieved from:
http://hdr.undp.org/sites/default/files/2018_summary_human_development_statistical_update_en.pdf

Works Cited

- United Nations Statistics Division [UNSD], 2017, “Summary Table: SDG Global Indicator Framework”. Retrieved from:
file:///C:/Users/Nicole/Desktop/Files/RESTART/Res.%20Asst._Campus%20Lib/MILID/Summary%20Table_Global%20Indicator%20Framework_08.11.2017.pdf
- United Nations Statistics Division [UNSD], 2018, “The Sustainable Development Goals Report 2018”. Retrieved from:
<https://unstats.un.org/sdgs/files/report/2018/thesustainabledevelopmentgoalsreport2018.pdf>
- World Travel & Tourism Council, 2017, “Travel & Tourism Economic Impact 2017, Jamaica”. Retrieved from:
<https://www.wttc.org/-/media/files/reports/economic-impact-research/countries-2017/jamaica2017.pdf>