# e SOCIOTOURISM, Technology Integration of Socio-Economy and Sustainable Tourism


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## ABSTRACT

Economic and social inequality is a problem that affects the G20 nations and the world. Eighty per cent of the world's GDP and 75 per cent of world trade are accounted for by the combined economies of the G20 countries. Socio-Economy plays a significant role in the Sherpa Track when debating crucial issues like trade, investment, energy, and social issues. The bottom socio-economic pyramid community, business owners, and small and medium companies (SMEs) all directly profit from it. It is anticipated that this will lessen global economic and social inequalities. To foster the growth of a tourism economy based on local expertise, e SOSIOTOURISM—a digital and technology integration of socio-economy also sustainable tourism—was founded on this. According to a review of the titles, abstracts, and keywords of reputable worldwide publication databases on SCOPUS.COM, research on social sustainability has grown since 1991. The number of researchers from Indonesia did not rise in tandem with the rise in recognized worldwide research & publications. Indonesia's contribution to social sustainability is minor compared to other Asian nations, such as China, with a sizable rural population.



## KEYWORDS

Socio Tourism, Sustainable Tourism, Technology Integration, Small and Medium Companies (SMEs)

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## 1 INTRODUCTION

Economic and social inequality is a problem that affects the G20 nations and the world. Eighty per cent of the world's GDP and 75 per cent of world trade are accounted for by the combined economies of the G20 countries. Socio-Economy plays a significant role in the Sherpa Track when debating crucial issues like trade, investment, energy, and social issues. The bottom socio-economic pyramid community, business owners, and small and medium companies (SMEs) all directly profit from it. It is anticipated that this will lessen global economic and social inequalities. To foster the growth of a tourism economy based on local expertise, e SOSIOTOURISM—a digital and technology integration of socio-economy also sustainable tourism—was founded on this [1]. According to a review of the titles, abstracts, and keywords of reputable worldwide publication databases on SCOPUS.COM, research on social sustainability has grown since 1991. The number of researchers from Indonesia did not rise in tandem with the rise in recognized worldwide research & publications. Indonesia's contribution to social sustainability is minor compared to other Asian nations, such as China, with a sizable rural population.

## 2 LITERATURE REVIEW

(1) The social effects of solar energy use in Bangladesh's rural communities, where solar power is used for daily requirements such as lighting, phone charging, and other items requiring little or no electricity. Energy Journal (2017) 34, citation [3].
(2) The wide variety of energy resources and infrastructure in the African region necessitate rural electrification solutions to meet various circumstances; the orange colour map illustrates solar PV possibilities as more cost-effective than diesel generators. (2011) 177, Jurnal Environmental Research Letters, reference [4].
(3) Rural South Africa's Solar Home System (SHS) is enhancing MSMEs' productivity by allowing them to do business at night utilizing solar power from the SHS; however, the subsidy monies are unclear. Customer satisfaction declines due to solar PV bills, high operational expenses, and inadequate SHS use, making the ESCO electricity company's operations unprofitable, Journal of Applied Energy (2015) 51, citation [5].

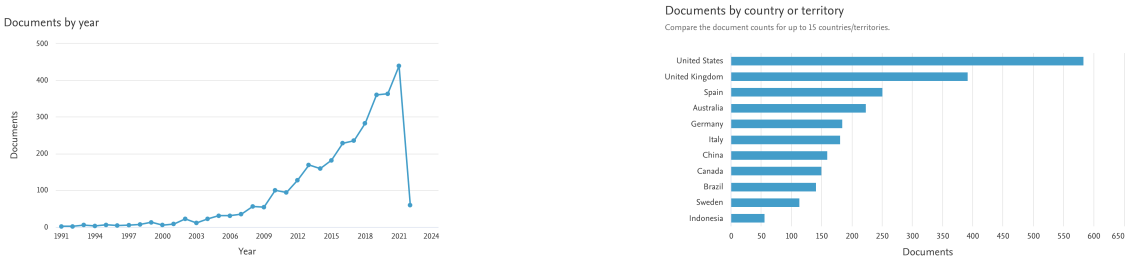


**Figure 1: Social Sustainability Research Publication at SCOPUS.COM**

(4) The idea and purpose of rural tourism support the necessity and viability of creating lodging facilities, such as hotels, guest homes, and the like, as a necessary component of the infrastructure for the growth of rural tourism in Rostov, Russia. (2020) 17, E3S Web of Conferences citation [6].
(5) In Benin, Ghana, Mali, and Senegal, political ties, public investment in transportation infrastructure, and food security are all closely related. Climate and land productivity also play a significant role in this relationship. Following their authority over the local economy, political issues impact where the route is located. Roads are significantly less prevalent in politically disenfranchised areas, which affects food security and the quality & allocation of transportation infrastructure, source [7] Journal of African Economies (2014)

## 3 RESEARCH METHODOLOGY

Strengthening digital and technology applications of sustainable socio-economy Desa v.1.0, sustainable digital tourism Desa ver1.0 & android app, and Solar-Sustainable-Sosio-economy technology Village are specific objectives and feasibility studies of e SOSIO-TOURISM. In 5 (five) village locations, including Sidoarjo Regency, Jombang Regency, and Gresik Regency, Solar-Sustainable-Tourism Villages and Solar-Sustainable-Business Villages are expected to strengthen the sustainable village economy and human resources. e SOSIOTOURISM, digitization, and strengthening of local socio-economic tourism based on new and renewable green energy, according to the research focus & strategic plan of the National University, which refers to the 2015–2045 National Research Master Plan. Specifications for the linkage of the scheme with these focus areas or strategic research plans are WebGIS ver1.0 village socio-tourism and socio-tourism-solar energy prototype (Year I 2022), WebGIS ver2.0 village socio-economy and socio-economy-solar energy prototype (Year II 2023), and AndroidAppGIS village socio-business and socio-business-solar energy prototype (Year III 2024) have research product specifications.

## 4 E SOCIOTOURISM TECHNOLOGY

Solar Panel 375 WP
Model: SANKELUX SPV 1610-375 Monocrystalline (TKDN value 47.50%); Dimensions: 1955x990x40mm; Weight: 35 kg; Voc: 47.8 V; Vmax: 40.8 V ; P max: 350.8 W; Efficiency: 18.1%
Box Junctions
Dimensions: 32.5x21x9cm
Hybrid Inverter

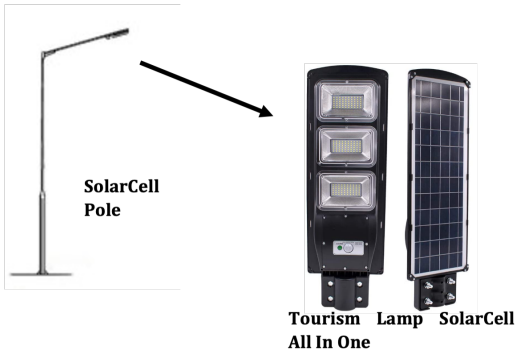


**Figure 2: Tourism Lamp Solarcell**

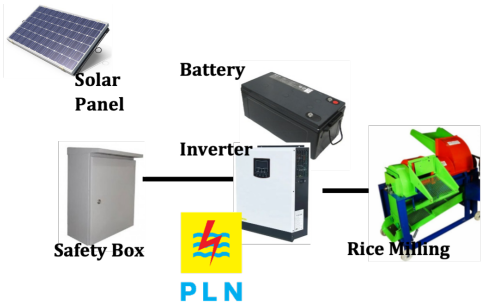


**Figure 3: Rice Milling Solarcell**

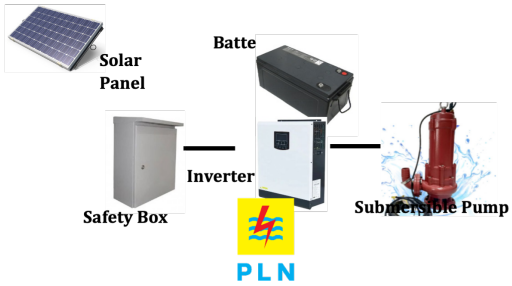


**Figure 4: Irrigation Pump Solarcell**

Model: Sunwatt Hybrid Inverter Offgrid; Rated power: 5000 watts; DC Input: 48 VDC, 117 A; AC Output: 230 VAC, 50/60 Hz, 22 A; Max PV Array Power: 5000 W; Min. Solar Voltage: 120 VDC; Max. Solar Voltage (VOC): 500 VDC; Max. Input Current: 18 A
Battery
Type : SMT12200 ; Voltage: 12V ; Capacity : 200 Ah ; Dimensions: 522x238x220mm; Weight: 55kg
Electric Motor
Motor power: 5 HP / 3750 Watt

## 5 CONCLUSION

Strengthening digital and technology applications of sustainable socio-economy Desa v.1.0, sustainable digital tourism Desa ver1.0 & android app, and Solar-Sustainable-Sosio-economy technology Village are specific objectives and feasibility studies of e SOSIO-TOURISM. In 5 (five) village locations, including Sidoarjo Regency, Jombang Regency, and Gresik Regency, Solar-Sustainable-Tourism Villages and Solar-Sustainable-Business Villages are expected to strengthen the sustainable village economy and human resources. e SOSIOTOURISM, digitization, and strengthening of local socio-economic tourism based on new and renewable green energy, according to the research focus & strategic plan of the National University, which refers to the 2015–2045 National Research Master Plan

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