

# The Role of Cooperatives in The Circular Economy of Indonesia

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**Abstract.** The evaluation of contemporary production and consumption systems is required by assessments of global sustainability. We place special emphasis on cooperatives' role as game-changing agents for sustainability and the circular economy as a replacement system. Despite the fact that cooperatives have been examined in relation to particular circularity strategies, like recycling, we offer the original cooperative research in Indonesia in relation to all circularity methods. We investigate whether business structures and tactics for the circular economy are compatible with cooperatives. According to our research, circularity originates from the mutualization at the cooperative model's core, which promotes a shared embracing of responsibility in response to demands. By rethinking production and consumption, sharing, and lasting commodities, cooperatives considerably contribute both upstream and downstream to the circular economy, according to the study.

**Keywords:** circular economy, cooperatives, sustainability, transformation, social economy

## 1 Introduction

On all political levels, sustainability has a solid political foundation. Goals for Sustainable Development for 2030 provide a worldwide framework to accomplish a number of objectives, including eradicating poverty and hunger, enhancing universal access to education, preserving the environment, and safeguarding life as we know it. However, it is challenging to accomplish these goals due to numerous crises including the COVID-19 epidemic and the conflict in Ukraine and Russia. Furthermore, assessments of the sustainability of the world's economies demonstrate that because underlying inclinations are the cause of these disasters toward unsustainability and necessitate a restructuring of the present-day production and consumption systems [15]. Demand creates space for different economic theories and more invisible or marginalized economic actors. The circular economy is gaining traction as a systemic tactic for achieving sustainability at the level of economic ideas [8]. In circular economy reformist and transformative approaches, alternative actors, such as the cooperative movement, are identified by circular economy research [4]. A cooperative is what the International Cooperatives Alliance describes as a "autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise" [6]. Cooperatives

indeed contribute to sustainability's social, economic, and environmental dimensions.

## 2 Literature Review

Released The Strategy for a Collaborative Decade by the International Cooperative Alliance (ICA), seeks to establish cooperatives as architects of long-term environmental, social, and economic sustainability by the year 2020, includes sustainability as one of its five pillars. To accomplish sustainable development and an environmentally sustainable economy, decent work was highlighted as a key goal at Sustainable Development Conference of the United Nations (Rio+20). Cooperatives are examined in several recent papers as a means of furthering sustainability goals [12][5][7][13].

The future of the cooperative business model depends heavily on sustainability, which is also a core value of cooperative research and practice [10]. the empirical studies on the circular economy and cooperatives as a way to operationalize sustainability [8], however, is still in its infancy and is largely confined to examples of recycling, waste-management practices and waste-pickers in supposedly poor countries [2][9][3][11]. There is information gap that necessitates a thorough investigation of cooperatives across all circularity techniques because the circular economy encompasses waste avoidance, waste reduction, sharing, and repair in addition to recycling – all upstream of recycling.

### 2.1 Cooperatives in Indonesian

Indonesia acknowledged cooperatives' presence in the nation symbolically on July 12, 1946. But 136 years ago, to the day, the first cooperative was discovered. Cooperatives gradually started to flourish within the diverse social and economic sectors of Indonesian society. *Diskup.kapuashulukab.go.id* claims that one of the elements driving the growth of cooperatives in Indonesian is their resemblance to the mutual cooperation, or reciprocal collaboration, culture of that country.

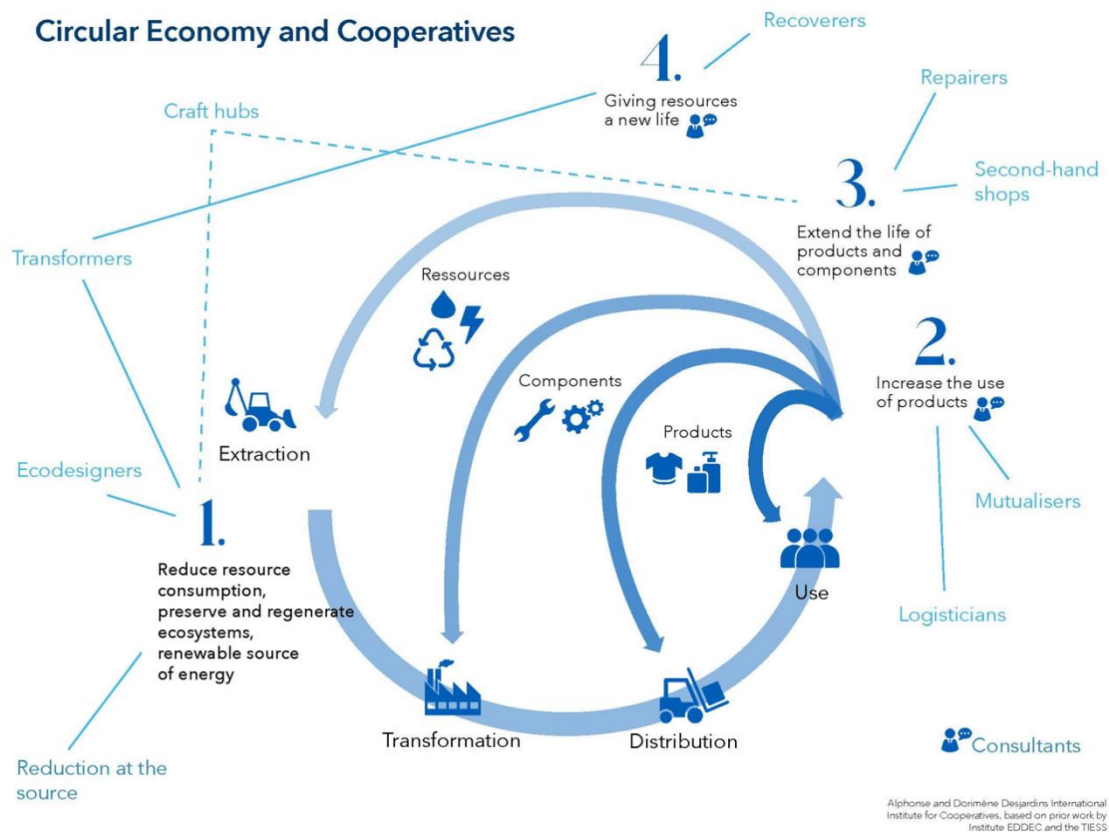
**Table 1.** The number of active cooperatives in Indonesian 2019-2021

Province	Number of Active Cooperatives by Province (Unit)		
	2019	2020	2021
Aceh	4115	4176	4102
North Sumatera	4199	4593	5033
West Sumatera	1919	2047	2200
Riau	2946	3150	3248
Jambi	2540	2190	2046
South Sumatera	3888	4102	3992

Bengkulu	1883	1948	1983
Lampung	2075	2088	2282
Bangka Belitung Islands	651	676	711
Riau Islands	884	929	982
Dki Jakarta	3447	4150	4542
West Java	13247	14706	15621
Central Java	13164	12190	10270
Di Yogyakarta	1751	1820	1853
East Java	21757	22464	22845
Banten	3881	4047	4216
Bali	4244	4193	4193
West Nusa Tenggara	2396	2479	2622
East Nusa Tenggara	2697	2808	2874
West Kalimantan	2935	2904	3142
Central Kalimantan	2510	2633	2921
South East Kalimantan	1721	1824	1875
East Kalimantan	2906	3036	3067
North Kalimantan	476	558	612
North Sulawesi	3620	3722	3668
Central Sulawesi	1429	1405	1435
South Sulawesi	4966	5057	4535
South East Sulawesi	3051	3009	2413
Gorontalo	884	928	975
West Sulawesi	837	909	862
Maluku	2373	2430	2488
North Maluku	917	997	1081
West Papua	608	663	723
Papua	2131	2293	2434
Indonesian	123048	127124	127846

Source : *Kementerian Koperasi dan UKM Data quoted from Publikasi Statistik Indonesia*

## 2.2 Circular Economy and Cooperatives



**Figure 1.** Circular Economy and Cooperatives

## 3 Research Methods

Existing knowledge serves as the foundation for all academic research endeavors, regardless of field. Therefore, doing so precisely must be a top goal for all academics. However, this project has become more difficult. The amount of knowledge produced in the field of business research is growing incredibly quickly, although staying fragmented and interdisciplinary. As a result, staying current with cutting-edge research is challenging, to be in the lead, and to assess the body of research in a specific area of inquiry. As a result, the literature review is now more crucial than ever as a research method. A more or less methodical compiling and synthesis of earlier research is known as a literature review [1][14].

## **4 Results And Discussion**

Through a groundbreaking examination of cooperatives in relation to all upstream and downstream circularity measures, our survey makes a significant contribution to closing this knowledge gap. The study sheds light on the uniqueness of cooperative circularity techniques as well as the demands of cooperatives in connection to circular economy. According to our research, circular business models and tactics work well for cooperatives. The mutualization at the cooperative model's focal point, which places emphasis on a common acceptance of responsibility in response to requirements, serves as their foundation. Cooperatives make significant upstream and downstream contributions to the circular economy by reevaluating consumption and production, sharing, and long-term usage, among other important upstream categories. Cooperatives can help entrench the circular economy in a firmly sustainable way, not "just" by dealing with garbage, but by integrating circular society built on regional economies and value chains by integrating the circular economy. To be more precise, by focusing on regenerative uses of resources and land, as well as the preservation of natural capital, the concept of reduction at source can transform sectors including agriculture, energy, and mobility.

## **5 Conclusion**

Cooperatives are drawn to circular business structures and strategies. They are rooted in the cooperative model's core principle of mutualize, this places and emphasis on an equal sharing of responsibility in response to demands. Cooperatives make a significant upstream and downstream contribution to the circular economy by thinking differently about sharing, long-term use, and manufacturing and consumption. Cooperatives can afterwards help to establish circular economy in a society where the needs of its people are prioritized over investors' profits and on their ties to local economies and value chains. "Reduction at the Source" emphasizes the opportunity to transition to a circular and sustainable society that forces industries like transportation, energy, and agriculture to regenerative practices.

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