

**PROSPCTS IN ORGANIC FARMING FOR ENHANCING QUALITATIVE YEILDS****Pradip Kumar Prusty<sup>1</sup>, Sunita Satapathy<sup>2\*</sup> and Arpita Mohapatra<sup>3</sup>**<sup>1,2,3</sup> Department of Zoology, School of Applied Science, Centurion University of Technology and Management, Odisha**ABSTRACT**

*Current organic agriculture performs well in several sustainability domains, like animal welfare, farm profitability and low pesticide use, but yields are commonly lower than in conventional farming. Now we are interested for more organic food. Because organic food is good for our health. So now we are trying to yield more organic food by organic farming. Here, we review risks and opportunities related to a broad range of sustainability domains associated with increasing yields in organic agriculture. We identify increased N input, weed, disease and pest control, improved livestock feeding, breeding for higher yields and reduced losses as the main measures for yield increases. We review the implications of their implementation for biodiversity, greenhouse gas emissions, nutrient losses, soil fertility, animal health and welfare, human nutrition and health and farm profitability. In this review our analysis reveal by using which strategies we can increase yield with less negative effects and we give high priority to that strategies. For example, increased N inputs in cropping carry many risks and few opportunities, whereas there are many risk-free opportunities for improved pest control through the management of ecosystem services. For most yield increasing strategies, both risks and opportunities arise, and the actual effect depends on management including active mitigation of side-effects. Our review shows that there must be some driving force and certain principles in organic agriculture by which we can increase our food system. Novel plant nutrient sources, including increased nutrient recycling in society, and in some cases mineral nitrogen fertilizers from renewable sources, and truly alternative animal production systems may need to be developed and accepted.*

*Keyword : Organic agriculture, Crop Yield , Biodiversity, Soil fertility, Animal welfare*

**I. INTRODUCTION**

Consumer demand for organic products has increased dramatically in the recent past, with global sales increasing more than threefold (although from low levels) since the turn of the century (Reganold and Wachter 2016). Some countries in Northern Europe are currently witnessing a boom in sales of organic foods. In Sweden, sales increased by 18% in 2016 compared with the previous year, with organic products now constituting 8.7% of total food sales (Ekoweb 2017). The main criticism of organic agriculture is its lower productivity at a time when food production has to increase substantially to feed a growing, more affluent global population.

Critics consider organic agriculture inefficient, especially in terms of land use. With the rising global demand for food, they point out that current agricultural land will not sufficient and further expansion of agricultural land into pristine ecosystems will result from the expansion of organic agriculture (Kirchmann et al. 2009, Connor and Mínguez 2012).

The business of farming is inherently risky. Variation in weather, insect infestations, and plant diseases, for instance, can hurt crop quality and reduce yields; small changes in aggregate supply and demand for agricultural products can lead quickly to substantial changes in prices; and changes in regulations can alter farmers' production practices and costs. Risk is generally described as "uncertainty that affects an individual's welfare, and is often associated with adversity and loss." Several studies have examined the relative importance of different risks and management strategies for different farms. A 1996 USDA survey of U.S. farmers noted that concern varied by farm enterprises and geographic regions.

The aim of this review is to shed some light on this question. We highlight and analyse possible risks and opportunities related to a broad range of sustainability aspects when aiming to increase yields in organic agriculture. As organic agriculture varies considerably across the globe, we focus our analysis to the context of Northern Europe, using examples from Sweden to illustrate our case. We end this review by summarising our findings and critically reflecting on how organic practices based on current EU regulations (EU 2014) affect the possibility of sustainably increasing yields. In this review, we use the following definitions of yield