

**GROWBAG**  
MADE WITH **40%** SCRAP

**POLYDIME**  
 **PLASTICS**

**GROW BAGS**

**A pressing Global Problem**

The world generates 2.01 billion tonnes of municipal solid waste annually, which is approximately 0.74 kgs per person per day. With the increase in global population and lifestyle changes this is expected to grow to 3.4 billion tonnes by 2050. 12% of this waste is said to be Plastic which is 241 Million MT annually in the environment. At least 33% of the overall waste (extremely conservatively) is not managed in an environmentally safe manner.



Data Source - [www.worldbank.org](http://www.worldbank.org)

**POLYDIME** has been associated with the plastics industry since 1998 producing Polythene in roll, bag and pouch form, Alkathene and drip irrigation pipes, multilayer lamination films and pouches. We take pride in being one of the sought after names in the plastics packaging industry in Sri Lanka & Internationally.

**Product Concept**



After much research, Polydime has now introduced a new range of Grow Bags where the contents of Virgin Polymer can be reduced and replaced with Recycle Plastic or Scrap of upto 40%. Our customers can benefit by this concept and create greater consumer appeal for their end product by showing their concern on environmental sustainability through the reduction of virgin plastic use. Furthermore, we have created a platform to salute such partners that use our product. A patented logo that would be added on the product showing the % of Recycle Plastic (Scrap) used in the product is available. All info in this regard would be showcased on



**www.upr.lk**

where all stakeholders can log into same and understand our sustainability strategy. We believe that we can reduce our overall virgin Polymer consumption by 40% in this business unit, going forward. By doing so together with our biodegradation range our goal is to partially close the loop on plastic polluting the environment.

**Awards & Accolades**



We have been successful in winning 5 Lanka Star awards and the prestigious Asiastar and WorldStar awards for this product concept.

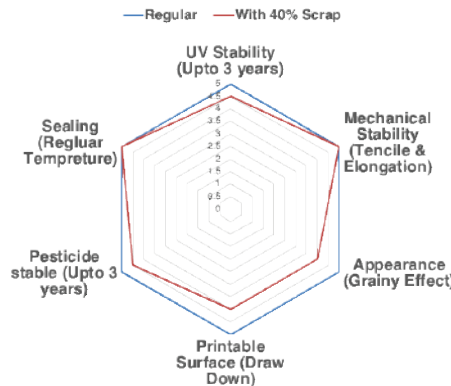
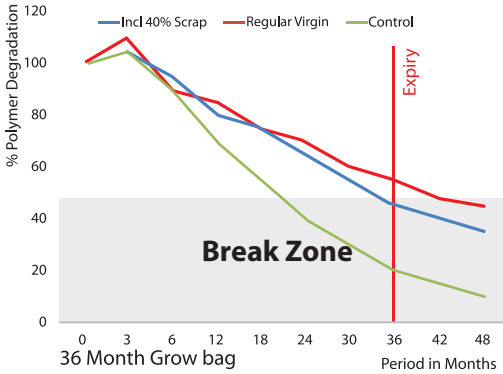


# Innovation

A Grow Bag is a complicated product that needs to last an extended period of time under heavy UV, Moisture, Oxygen and in some cases accepted levels of pesticide and weedicide sprayed on its surface. With a regular high intensity Virgin Polymer based products this is a challenge, but when Recycled Plastic is included into the equation this become a serious complication as the Polymer bonds need to be further strengthened to meet exposure demands.



## UV Exposure analysis

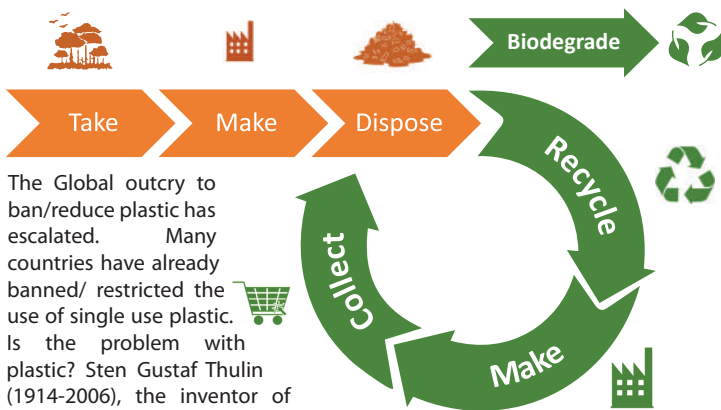


## Physical characteristics

Polydime's Innovation Centre has extended its research learnings from the regular Grow bag exposure studies and applied this knowledge to develop a product with upto a maximum of 40% Recycled Plastic (Scrap) content in the product. The required specification of parameters have been achieved and most importantly the product has performed successfully in terms of UV exposure both in accelerated and real time exposure studies.



## Thinking circularity



The Global outcry to ban/reduce plastic has escalated. Many countries have already banned/ restricted the use of single use plastic. Is the problem with plastic? Sten Gustaf Thulin (1914-2006), the inventor of the plastic bag never meant it to be thrown in the environment. The thinking was always to reuse and recycle it at the end of its shelf life. This thinking has given rise to the concept of the "Circular Economy of Plastic. The usual norm is to make and dispose anyway fit. However the circular economy is about reducing virgin polymer in the product by either reusing plastic by processing waste plastic and including it back into the product or by using more sustainable options for manufacture such as biodegradable plastics.

### Polydime's contribution

As a Plastic manufacturer we have realized the importance of being responsible with plastic products that help make life convenient, cost effective and efficient. Hence we have reorganised our business model to do our best to work towards environmental sustainability. Our Strategy is 3 fold - "Recycle, Degrade, Educate". With this new thinking we are confident that upto 50% of our production can be made environmentally sustainable.

## Leadership in Recycled Plastics



Polydime Plastics has been in the Recycled Plastic business for over 15 years with a state of the art recycle plant encompassing the full value chain from material collection to product manufacture. The plant has a Global Recycle Standards approval for Recycle Claims Standards (RCS) where full traceability is available and Transaction Report can be obtained from certification body confirming the use of recycled plastic in the product.

