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## Book of Abstracts

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## **Seasonality of Dietary Diversity and Food Consumption in the Barotse Floodplain, Zambia**

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In Zambia, nutritional problems, particularly undernutrition and micronutrient deficiencies, are a major public health concern. In the Consultative Group of International Agriculture Research programme Aquatic Agricultural Systems (AAS) in the Barotse floodplain, Zambia, improving nutrition is one of the key initiatives. Dietary diversification is a recommended strategy to improve micronutrient intake. The study aimed at investigating the seasonality of dietary diversity in order to identify opportunities for diversification and hence improvement of micronutrient intake. The study population consisted of infants 6-23 months of age (n = 252) and adults (n = 1089) aged 16-97 years. Data were collected at three times of the year (round 1: July/August; round 2: November; round 3: February/March) using qualitative 24 hour dietary recalls. Indicators used were the Minimum Dietary Diversity for women (MDD-W) and infants and young children (MDD-C). Only 7% of women and 15% of infants were consuming the proposed minimum number of food groups. The share of adults and infants reaching MDD was significantly different over the seasons ( $p < .001$ ). The percentage of individuals consuming food groups were also significantly different over the seasons. Results revealed that vitamin A-rich dark green leafy vegetables were consumed by 23% of adults in round 1, 42% in round 2 and 70% in round 3. Food consumption and dietary diversity are highly seasonal. The collected data together with previously developed seasonal calendars and environmental information helped the AAS communities to make informed joint decisions on which crops to plant in AAS learning plots to improve food availability especially for those food groups showing the biggest seasonal gaps.

**Key words:** dietary diversity, nutritional problems, micronutrients